# LBT-A295/D550

# SERVICE MANUAL



**US Model** LBT-D550

Canadian Model

AEP Model

**UK Model** 

· LBT-A295/D550 is composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

Australian Model

**COMPONENT MODEL NAME FOR THESE SYSTEM** 

PX Model

E Model

	LBT-A295				LBT-D550				
	Canadian	AEP	UK	G	E	AU	MX	PX	US
STEREO DECK RECEIVER		HCD-A295				HCD-D550			
TURN TABLE			PS-LX56P						
SPEAKER SYSTEM	SS-D290					SS-I	D290	-	SS-D555

: AUSTRALIA : MEXICO : GERMANY

#### PARTS, LIST

Part No.	Description
1-501-374-11	ANTENNA, LOOP
1-501-536-11	ANTENNA (AEP)
3-758-285-11	MANUAL, INSTRUCTION (UK)
	(ENGLISH)
3-758-285-21	MANUAL, INSTRUCTION (D550)
	(ENGLISH)
3-758-285-31	MANUAL, INSTRUCTION (CA)
	(ENGLISH, FRENCH)
3-758-285-41	MANUAL, INSTRUCTION (AEP)
	(ENGLISH, FRENCH, SPANISH, PORTUGUESE)
3-758-285-51	MANUAL, INSTRUCTION(AEP,G)
	(GERMAN, DUTCH, SWEDISH, ITALIAN)
3-758-285-61	MANUAL, INSTRUCTION(AEP)
	(DANISH), FINNISH)
3-758-285-71	MANUAL, INSTRUCTION(E,AU,PX)
	(ENGLISH, FRENCH, SPANISH, CHINESE)
3-758-285-81	MANUAL, INSTRUCTION (MX)
- 1 <del></del>	(SPANISH)
	(51(1511)

	Part No.	Description
*	4-963-189-01	INDIVIDUAL CARTON(UK)
*	4-963-192-01	INDIVIDUAL CARTON(AEP,G)
*	4-963-193-01	INDIVIDUAL CARTON(D550)
*	4-963-196-01	INDIVIDUAL CARTON(CA,AU,PX)
*	4-963-197-01	INDIVIDUAL CARTON(E)
*	4-966-411-01	INDIVIDUAL CARTON(MX)
	A-4674-087-A	TURN TABLE MAT ASSY(PS-LX56P)
	1-467-430-11	COMMANDER, STANDARD
		(RM-S221)(HCD)
	2-181-754-21	COVER(MLY), BATTERY(RM-S221)
*	3-376-136-01	CUSHION(CASSETTE HALF)(HCD)
*	4-947-532-01	SNOW BOX (L)(PS-LX56P)
*	4-947-533-11	SNOW BOX (R)(PS-LX56P)
*	4-963-173-02	CUSHION(HCD)
*	4-964-536-11	CUSHION(SS-D290/D555)
		·

• Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

# COMPACT HI-FI STEREO SYSTEM

SON



**Sony Corporation Audio Group** 

English 94A04101-1D Printed in Japan © 1994.1

# HCD-A295/D550

**SERVICE MANUAL** 



US Model

HCD-D550

Canadian Model

AEP Model

UK Model E Model

Australian Model

PX Model

HCD-A295

HCD-A295 and HCD-D550 is the tuner, deck, CD and amplifier section in LBT-A295 and LBT-D550 respectively.

Photo: HCD-A295

#### **SPECIFICATIONS**

# AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm loads, both channels driven, from 70—20,000Hz; rated 100 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

#### **Amplifier**

Continuous RMS power output

10W+10W (6 ohms, at 1kHz, 5% THD)

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	300 mV	47 kilohms
PHONO	Phono	3 mV	47 kilohms

Output	Jack type	Impedance
SURROUND SPEAKER (Except US, CND)	Phono	Accepts speakers of 8—16 ohms
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response

15Hz to 50kHz ± dB

Tuner

System

FM stereo

FM/AM superheterodyne tuner



CD Section	Model Name Using Similar Mechanism	CDP-411/511/D7
	CD Mechanism Name	CDM14-5BD13
	Base Unit Name	BU-5BD13
DECK Section	Model Name Using Similar Mechanism	HTC-D159
	Tape Transport Mechanism Type	TCM-180VW-H11

FM tuner section

Tuning range

Antenna

87.5 to 108MHz 300 ohms balanced

75 ohms unbalanced

Intermediate frequency 10.7MHz

AM tuner section

Tuning range

g range AM: 530 to 1,710kHz (US, CND)

MW: 531 to 1,602kHz (Except US, CND, IT) MW: 522 to 1,611kHz (IT)

LW: 153 to 279kHz (AEP, UK)

AM loop antenna

External antenna terminal

#### Cassette deck

Antenna

Recording system Frequency response

Wow and flutter

4-track 2-channel stereo DOLBY NR OFF

(Except E, AUS, MX, PX)

With Type II cassette (Sony UX-S)

40 Hz to 14 kHz ( $\pm 3 dB$ ) With Type I cassette (Sony HF-S)

40Hz to 13kHz (±3dB) 0.1% (WRMS) (D550)

W. PEAK ±0.2% (DIN) (A295)

-continued on next page-

COMPACT DISC DECK RECEIVER
SONY

SON

Compact disc player

Laser Semiconductor laser

Wavelength 780-790nm

Frequency response 2Hz to  $20kHz \pm 0.5dB$  (A295)

2Hz to  $20kHz \pm 1dB$  (D550)

Signal-to-noise ratio More than 93dB Dynamic range More than 90dB

Harmonic distortion Less than 0.008% (1kHz) (A295)

Less than 0.01% (1kHz) (D550)

Channel separation More than 90dB (1kHz)

General

Power requirements 120V AC, 60Hz (US, CND)

220-230V AC, 50/60Hz (AEP, G, IT)

240V AC, 50Hz (UK)

110-120V/220-240V AC, 50/60Hz

(E, PX)

240V AC, 50/60Hz (AUS)

120V AC, 50/60Hz (MX)

Power consumption 105W (A295)

180W (D550)

Mass Approx. 10.9kg (24 lb 5 oz) (A295)

Approx. 12kg (26 lb 8 oz) (D550)

Dimensions Approx.  $355 \times 395 \times 405$ mm

 $(14\times15^5/_8\times16 \text{ inches})$ 

(w/h/d, including projections)

Supplied accessories

Remote commander RM-S221 (1)

Batteries Sony SUM-3 (NS) (2)

FM wire antenna (1) AM loop antenna (1)

45-rpm adaptor

(1) (AEP2, UK, G: Supplied

with the turntable)

Design and specifications are subject to change without notice.

Abbreviations

CND: Canadian model
G: German model

IT : Italian model

MX : Mexican model

AUS: Australian model

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CLASS 1 LASER PRODUCT LUOKAN 1 LASERLAITE KLASS 1 LASERAPPARAT

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.

CAUTION; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

ADVARSEL; USYMUG LASERSTRALING VED ABNING NAR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGA UDS ATTELESE FOR STRALING.

VAROI; AVATTAESSA JA SUQUALUNTUS OMTETTAESSA DLET ALTIFINA LASERSATERIYUE.

VARNING; LASERSTRALING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URROPPLAD.

ADVARSEL; USYMUG LASERSTRALING NAR DEKSEL APNES UNNGA EKSPONERING FOR STRALEN.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol  $\square$  are trademarks of Dolby Laboratories Licensing Corporation.

#### SAFETY CHECK-OUT (US Model)

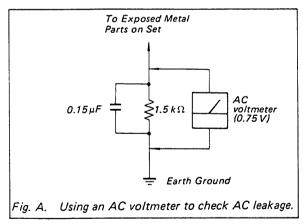
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

#### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



#### SAFETY-RELATED COMPONENT WARNING!!

#### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

#### NOTES ON HANDLING THE OPTICAL PICK-UP **BLOCK OR BASE UNIT**

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

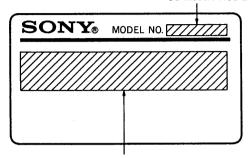
#### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

#### **MODEL IDENTIFICATION**

-Label Model Number-

Canadian, AEP, G, IT, UK, E, MX, PX, AUS model: HCD-A295 US model: HCD-D550



US model

: COMPACT DISC DECK RECEIVER

AC: 120V 60Hz 180W

Canadian model

: COMPACT DISC DECK RECEIVER

AC: 120V 60Hz 105W

AEP, Italian model: COMPACT DISC DECK RECEIVER AC: 220-230V~50/60Hz 105W

German model : COMPACT HIFI STEREO SYSTEM

COMPACT DISC DECK RECEVIER HCD-A295 STEREO TURNTABLE SYSTEM PS-LX56P AC: 220-230V~50/60Hz 105W

: COMPACT DISC DECK RECEIVER

UK model

AC: 240V~50Hz

E, PX model

: COMPACT DISC DECK RECEIVER

AC: 110-120V/220-240V~50/60Hz 105W : COMPACT DISC DECK RECEIVER

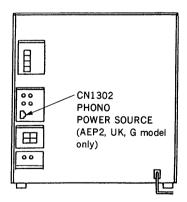
Australian model Mexican model

AC: 240V~50/60Hz 105W : COMPACT DISC DECK RECEIVER

AC: 120V~50/60Hz 105W

#### Abbreviations

AEP2: AEP unit with PHONO POWER SOURCE



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## **SECTION 1 GENERAL**

This section is extracted from instruction manual.

- 20 DISC SELECT 1-5 button (30, 34, 36, 38,

- 10 Dist Tab.
  21 Dist Tab.
  32 Dist Tab.
  33 Tabe button (32)
  35 REPEAT button (46)
  35 CTECK (program check) button (40)
  35 CTECK (program check) button (40)
  35 CTECK (program clear) button (40)
  35 DIT button (48)
  35 PLAY MODE buttons
  36 PLAY MODE buttons
  37 CONTINUE buttons (36, 40, 50)

-183 -123 -123

1

20

9 SPECTRUM ANALIZER display (14) [0] PRESET EQUALIZER buttons and indicators (14)
11 Function selectors and indicators
12 DBFB (dynamic bass feedback) cont

(14)
13 VOLUME control (14)
14 HEADPHONES jack (14)
15 SURROUND control (14)

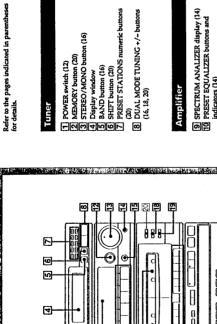
# Cassette Deck

118 Cassette holders
117 Tape operation bu
118 Leftward fast

18 TAPE SELECT button (22, 24, 28)
19 DVBBING SPEED (HIGH/NORMAL)
button (28)

(noise reduction) (ON/OFF) switch (Except E, AUS, MX, PX) 20 DOLBY NR

89



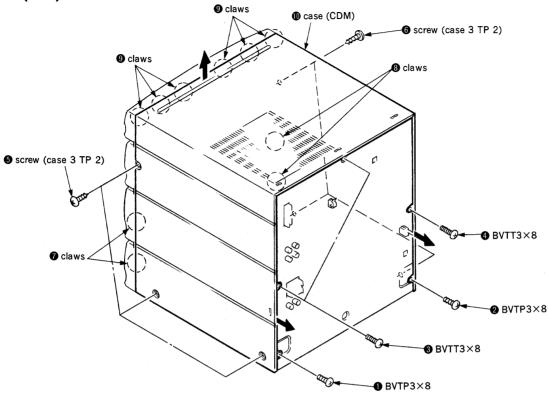
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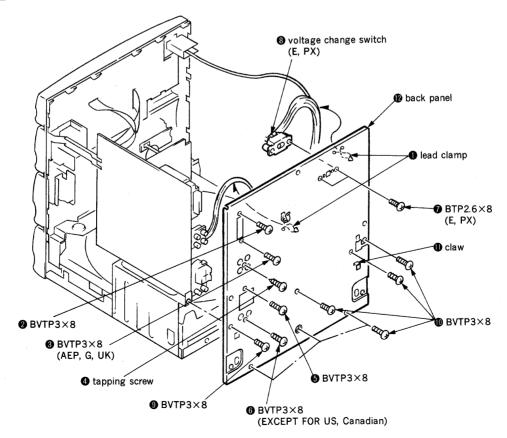
# SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

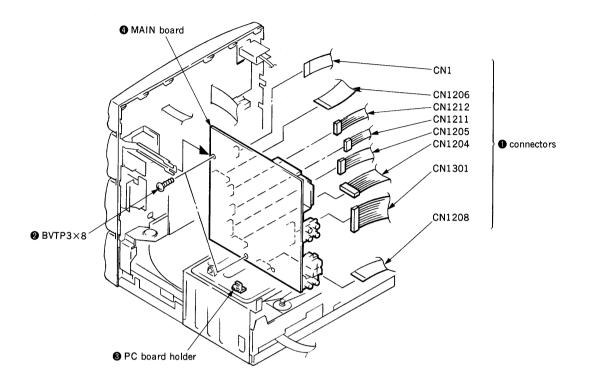
#### 2-1. CASE (CDM)



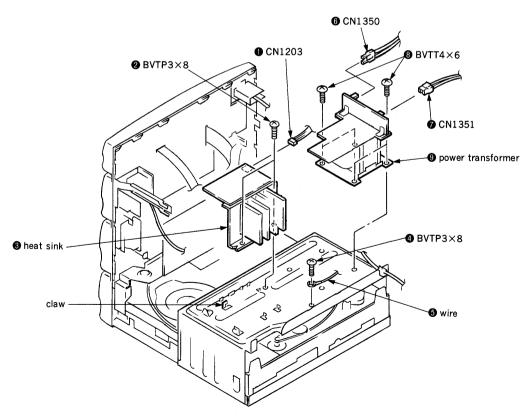
#### 2-2. BACK PANEL



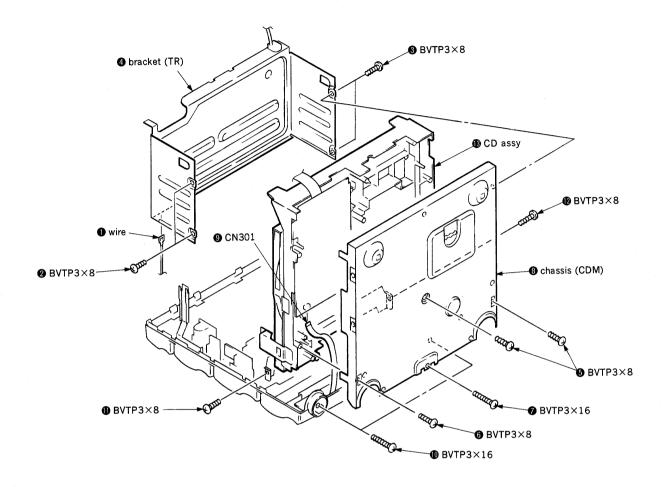
#### 2-3. MAIN BOARD



#### 2-4. POWER TRANSFORMER

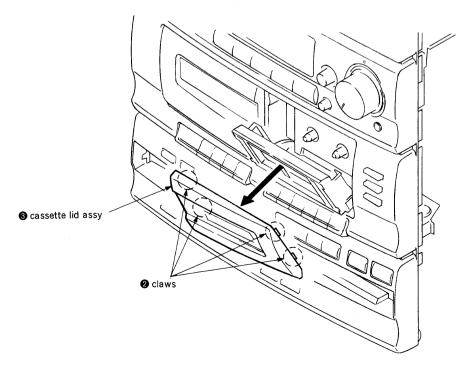


#### 2-5. CD ASSY



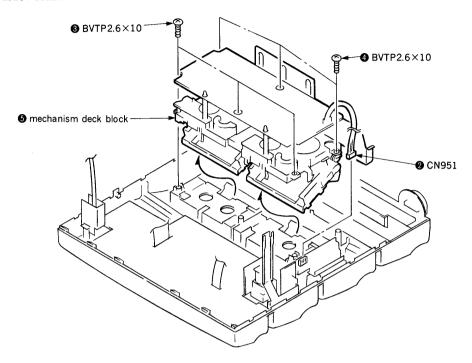
#### 2-6. CASSETTE LID ASSY

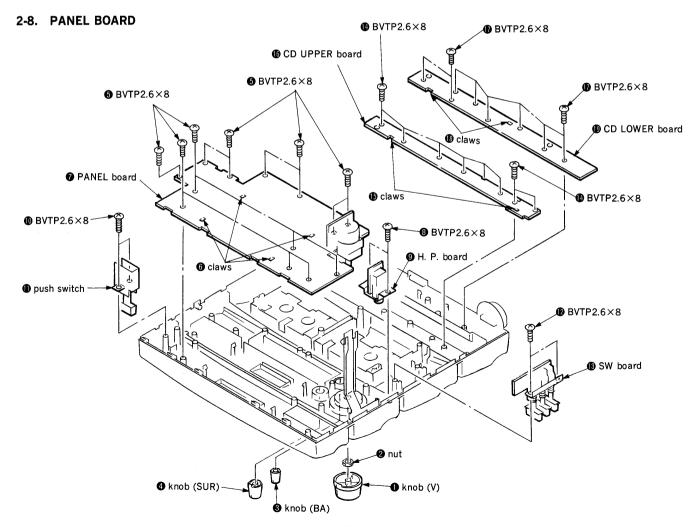
Push the EJECT button.



#### 2-7. MECHANISM DECK BLOCK

• Push the EJECT button.

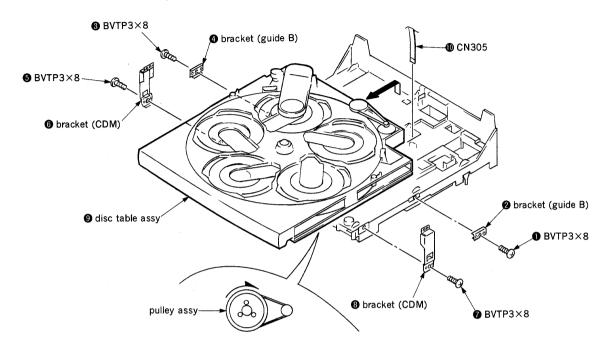




#### 2-9. DISC TABLE ASSY

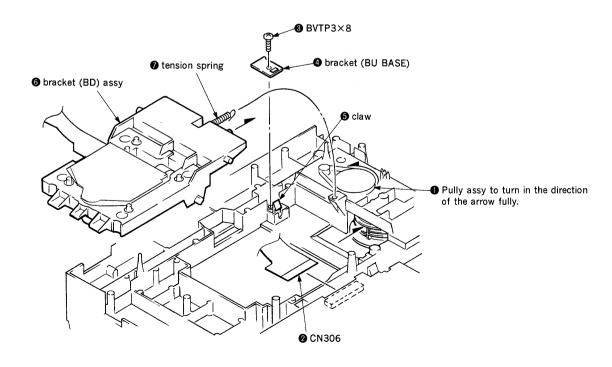
Note on assembly: Turn the pully assy in the direction of the arrow.

Down the bracket (BD) assy, and assemble the disc table assy.



### 2-10. BRACKET (BD) ASSY

Note on assembly: Set to the arrow portion of gear (loading A) for shaft (CAM).



### **SECTION 3 MECHANICAL ADJUSTMENTS**

#### **PRECAUTION**

1. Clean the following parts with a denatured alcoholmoistened swab:

record/playback heads

pinch rollers

erase head

rubber belts

capstan

idlers

- 2. Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

#### **Torque Measurement**

Torque	Torque meter	Meter reading
FWD	CQ-102C	30-70g•cm (0.42-0.97oz•inch)
FWD Back tension	CQ-102C	1.5-5.5g•cm (0.020-0.076oz•inch)
FF/REW	CQ-201B	63g•cm or more (0.87oz•inch or more)

## **SECTION 4 ELECTRICAL ADJUSTMENTS**

**DECK SECTION** 

0dB = 0.775V

- 1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- The adjustments should be performed for both L-CH and R-CH.
- Switches and controls should be set as follows unless otherwise specified.

TAPE SELECT switch: TYPE I

DOLBY NR switch

: OFF (Except for E, Australian,

Mexican, PX)

Туре	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment

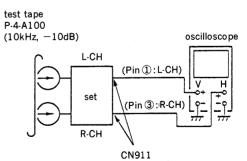
#### Record/Playback Head Azimuth Adjustment

DECK A DECK B

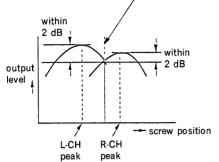
Note: Perform this adjustments for both decks.

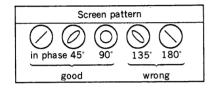
Procedure:

1. Mode: Playback



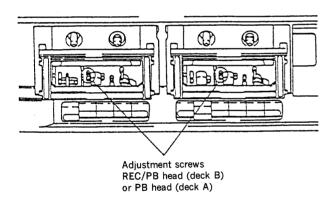
2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 2 dB of peak.





After the adjustments, apply suitable locking compound to the parts adjusted.

#### Adjustment Location:



## Tape Speed Adjustment DECK A DECK B

**Procedure:**Mode: Playback

test tape
WS-48B
(3kHz, 0dB)

set

CN911 (Pin ①: L-CH)
(Pin ③: R-CH)

High speed adjustment (Must be first Adjustment deck B)

- Short pin CN912 on set "DUBBING SPEED" switch to "HIGH". Then at HIGH speed mode.
- 2. Adjust RV901 so that the frequency counter reads  $6,000 \pm 20$ Hz.

Normal speed adjustment

- Remove the short pin from CN912 on set "DUBBING SPEED" switch to "NORMAL". Then at NORMAL speed mode.
- 2. Adjust RV902 so that the frequency counter reads  $3,000 \pm 10$  Hz.

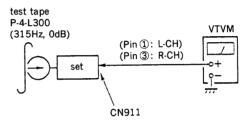
Frequency difference between deck A and deck B the beginning of the tape should be within  $\pm 1\%$ .

Adjustment Location: main TC board

# Playback Level Adjustment DECK A DECK B

#### Procedure:

Mode: Playback



Deck A side RV701 (L-CH), RV801 (R-CH)
Deck B side RV702 (L-CH), RV802 (R-CH)
so that the limits below are satisfied.

#### Adjustable limits:

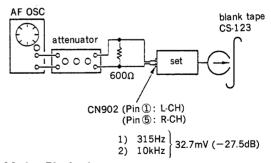
CN911 PB level: 366.7 to 411.4mV (-6.5 to -5.5dB) level difference between the channels: within  $\pm 1$ dB

Adjustment Location: main TC board

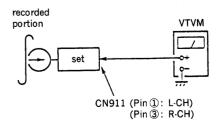
## Record Bias Current Adjustment DECK B

#### Procedure:

1. Mode: record



2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable level as follows.

If these levels do not adjustable level, adjustment the RV704 (L-CH) and RV804 (R-CH) to repeat step 1 and 2.

Adjustable level: Playback output of 315Hz to playback

output of  $10kHz: 0\pm0.5dB$ 

Adjustment Location: main TC board

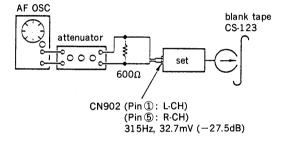
#### Record Level Adjustment | DECK B

#### Setting:

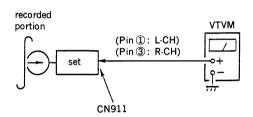
TAPE SELECT switch: TYPE I

#### Procedure:

1. Mode: record



#### Mode: playback



Confirm playback the signal recorded in step1 become adjustable level as follows.

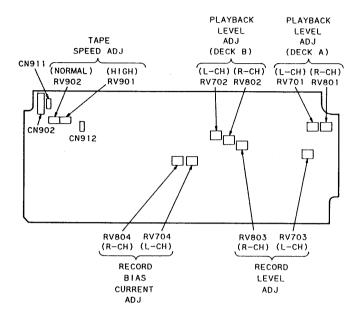
If these levels do not adjustable level, adjustment the RV703 (L-CH) and RV803 (R-CH) to repeat step 1 and 2.

#### Adjustable limits:

CN911 PB level: 30.9 to 34.6 mV (-28 to -27 dB)

Adjustment Location: main TC board

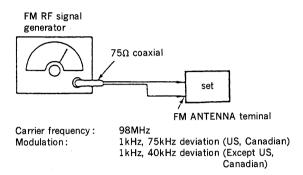
#### Adjustment Location: main TC board (component side)



# TUNER SECTION OdB= $1\mu$ V

#### • FM SECTION

#### Setting:



#### FM Tuned Level Adjustment

Band: FM

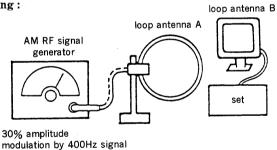
#### Procedure:

- 1. Supply a  $17.8\mu V$  (25dB $\mu$ ) 98MHz signal from the ANTENNA terminal.
- 2. Tune the set to 98MHz.
- 3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location: main board

#### • AM SECTION

Setting:



#### AM (MW) Tuned Level Adjustment

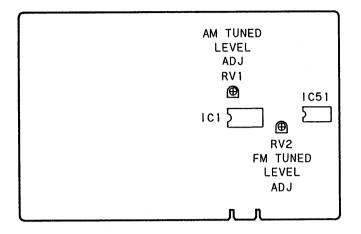
Band: AM or MW

#### Procedure:

- 1. Set loop antenna A so that the loop antenna B input level becomes 1.413 mV ( $63 dB\mu$ ).
- 2. Tune the set to 1,050kHz (US, Canadian) or 999kHz (Except US, Canadian).
- 3. Adjust RV1 so that the TUNED indicator goes on.

Adjustment Location: main board

Adjustment Location: main board (component side)

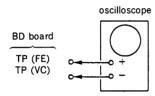


#### **CD SECTION**

#### Note:

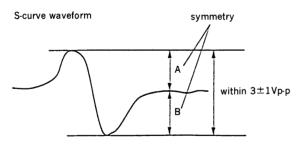
- 1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
- 2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
- 3. Use the oscilloscope with more than  $10M\Omega$  impedance.
- 4. Clean an objective lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

#### S-Curve Check



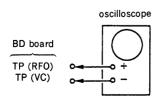
#### Procedure:

- 1. Connect oscilloscope to test point TP (FE) on BD board.
- Connect between test point TP (FEI) and TP (VC) by lead wire.
- 3. Turned Power switch on.
- 4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (Actuate the focus search when disc table is moving in and out.)
- 5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within  $3\pm1\text{Vp-p}$ .



- 6. After check, remove the lead wire connected in step 2.
- **Note:** Try to measure several times to make sure that the ratio of A: B or B: A is more than 10: 7.
  - Take sweep time as long as possible and light up the brightness to obtain best waveform.

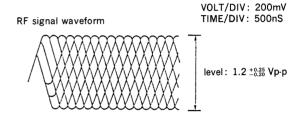
#### **RF Level Check**



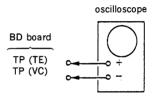
#### Procedure:

- Connect oscilloscope to test point TP (RFO) on BD board.
- 2. Turned Power switch on.
- 3. Put disc (YEDS-18) in and playback.
- 4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

**Note:** Clear RF signal waveform means that the shape "\$\rightarrow\$" can be clearly distinguished at the center of the waveform.



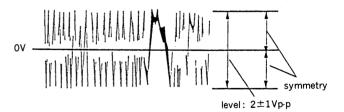
#### E-F Balance Check



#### Procedure:

- 1. Connect test point TP (ADJ) to ground and TP (TEI) to TP (VC) with lead wire.
- 2. Connect oscilloscope to test point TP (TE) on BD board.
- 3. Turned Power switch on.
- 4. Put disc (YEDS-18) is and playback.
- 5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level

#### Traverse waveform

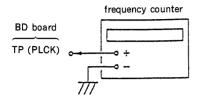


6. Remove the lead wire connected in step 1.

### RF PLL Free-run Frequency Check

#### Procedure:

 Connect frequency counter to test point (PLCK) with lead wire.

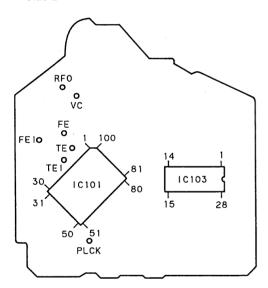


- 2. Turned Power switch on.
- 3. Confirm that reading on frequency counter is 4.3218MHz.

#### Adjustment Location:

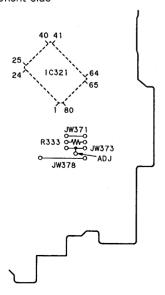
#### [BD BOARD]

-Side B-



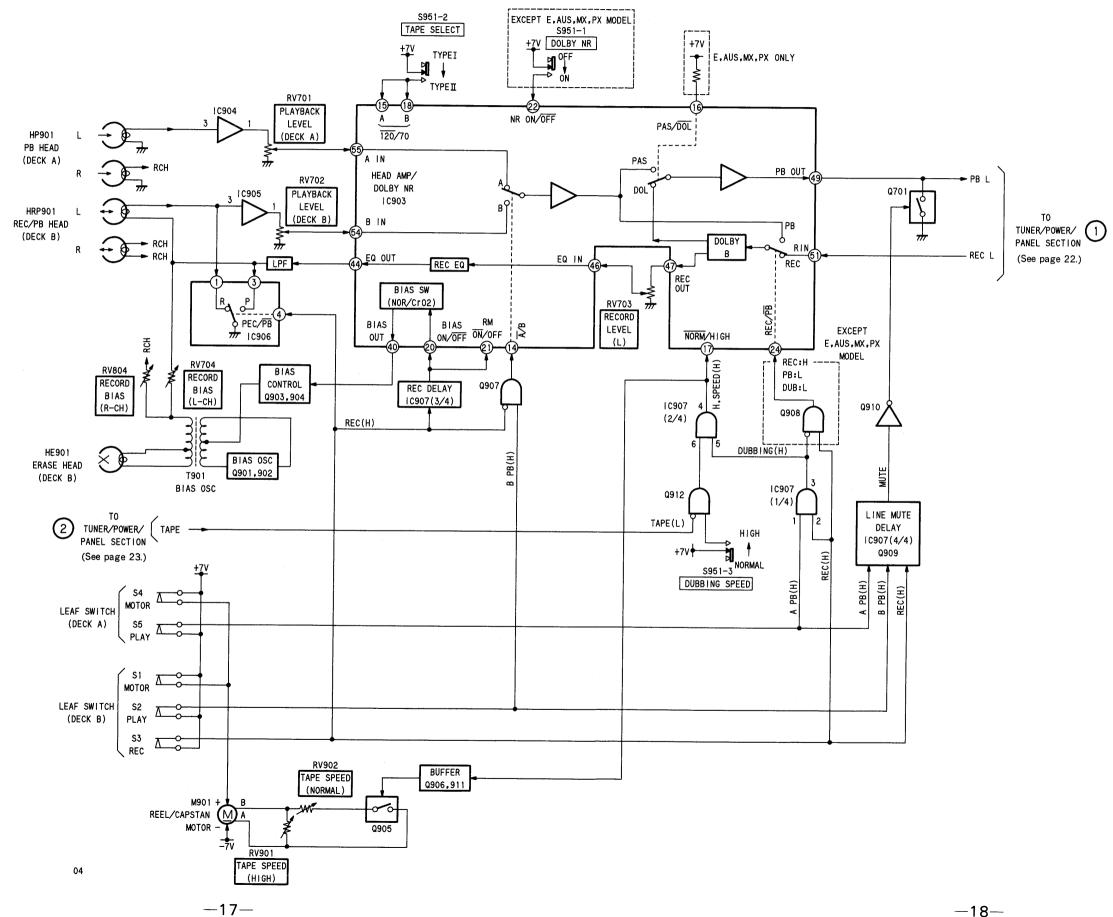
### [CD MAIN BOARD]

-Component side-

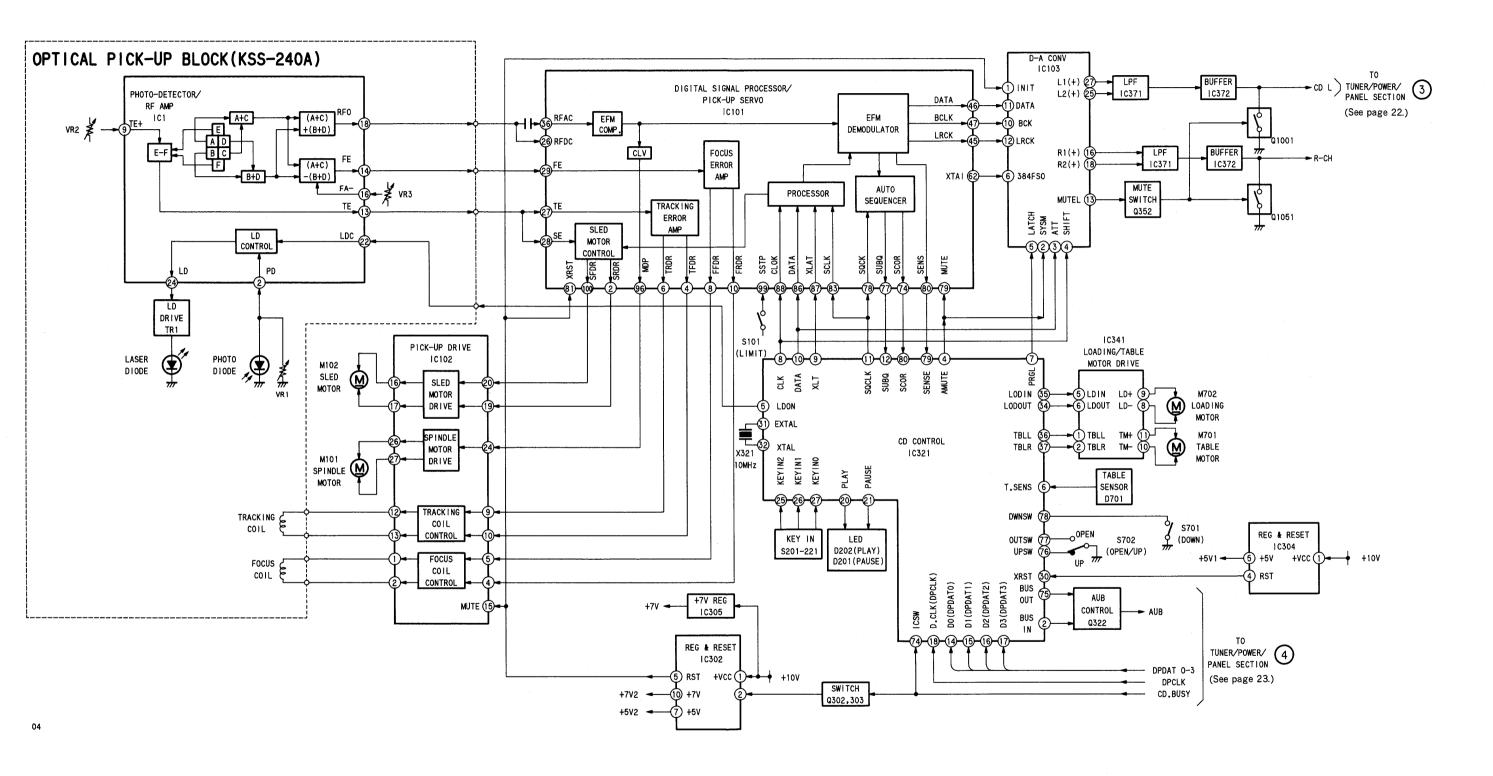


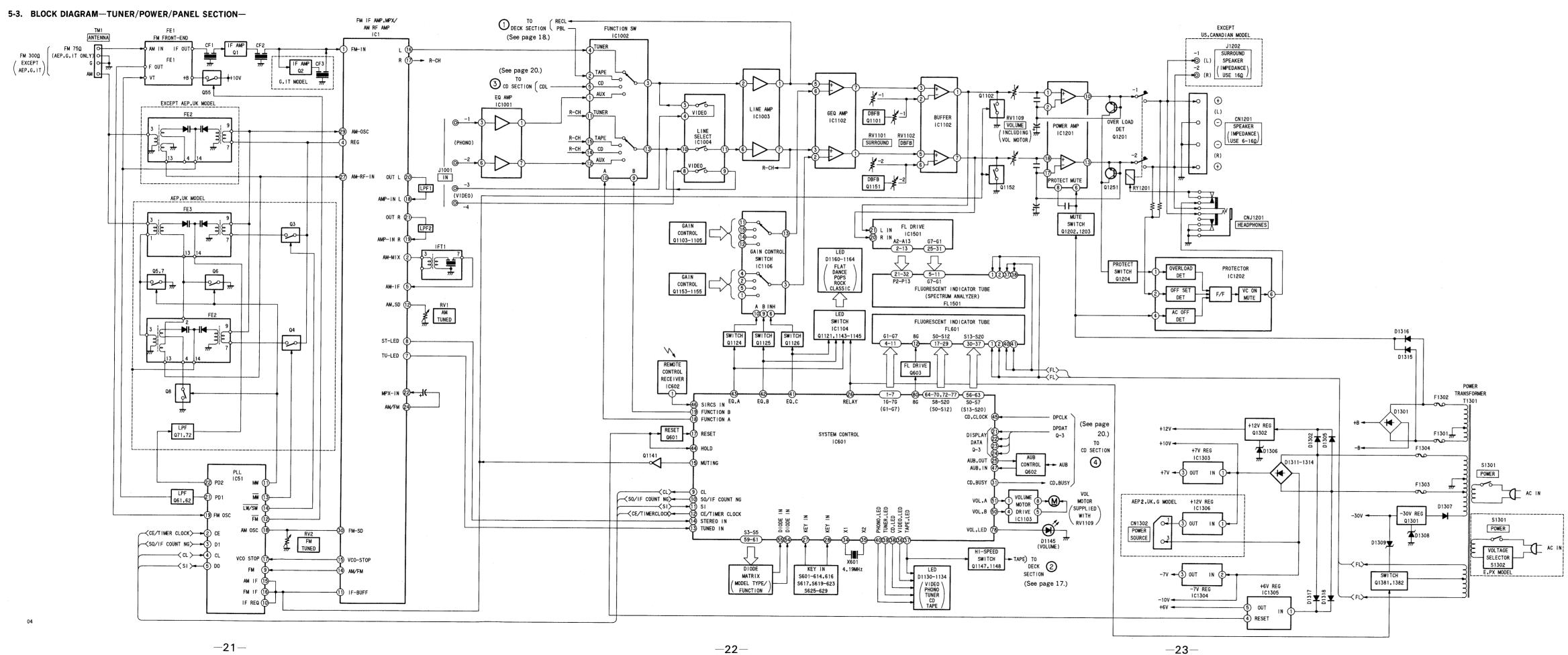
## **SECTION 5 DIAGRAMS**

#### 5-1. BLOCK DIAGRAM—DECK SECTION—



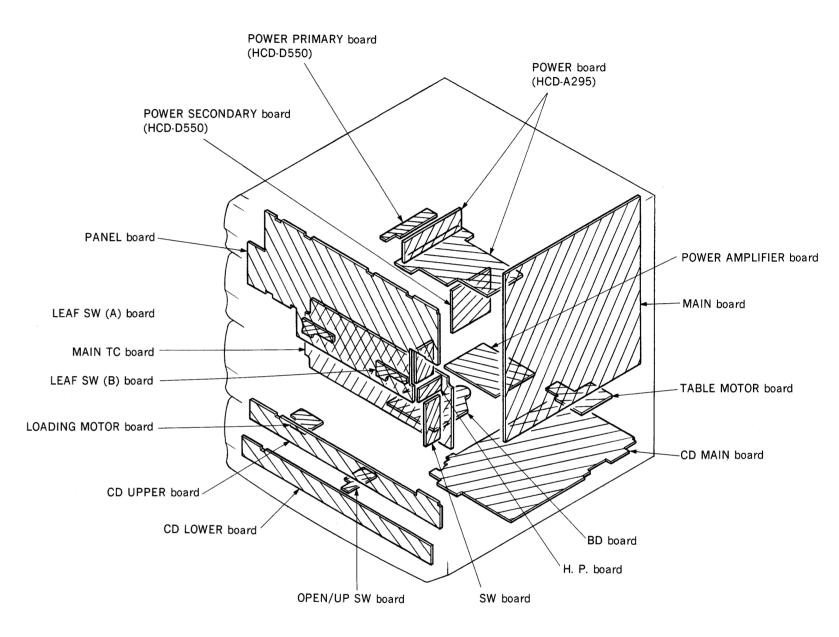
#### 5-2. BLOCK DIAGRAM—CD SECTION—





#### 5-4. CIRCUIT BOARDS LOCATION

-24-



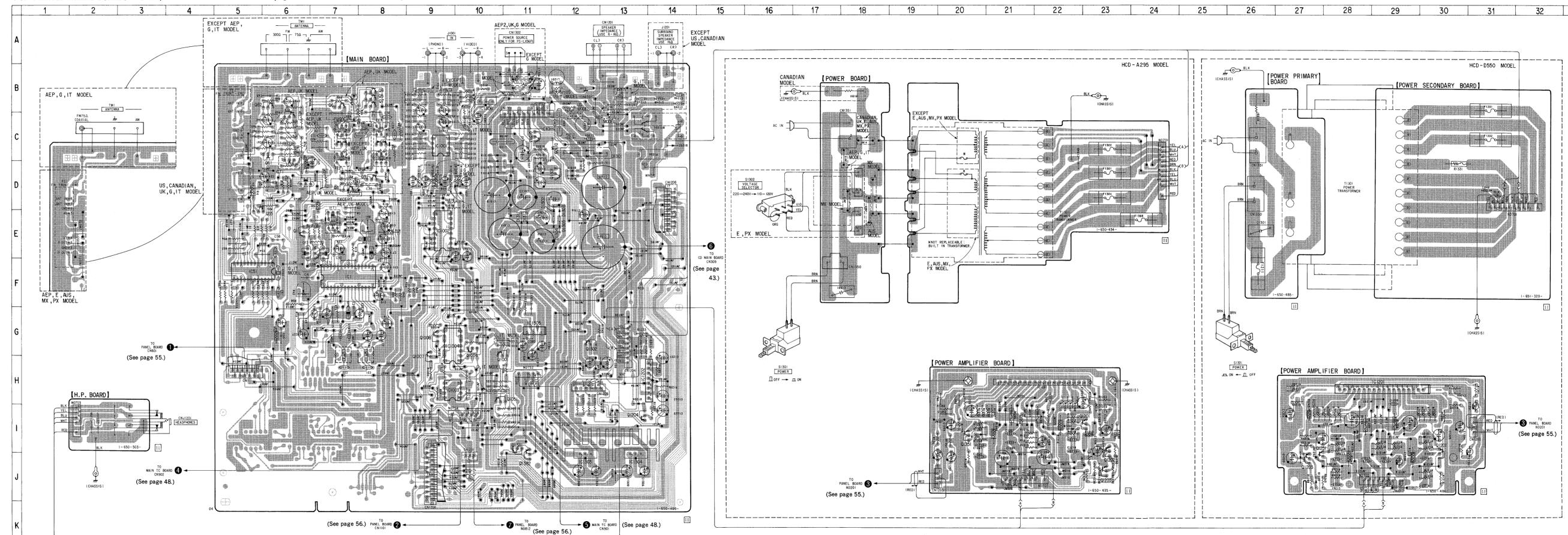
#### Semiconductor Location

• Semiconductor Location					
Ref. No.	Location	Ref. No.	Location		
D1	E-5	IC1202	H-13		
D1201	I-21	IC1303	J-12		
D1202	C-14	IC1304	J-13		
D1204	H-13	IC1305	G-11		
D1210	J-27	IC1306	B-10		
D1211	J-27				
D1251	I-20	Q1	E-6		
D1301	C-12	Q2	E-7		
D1302	E-12	Q3	D-8		
D1303	E-12	Q4	D-7		
D1304	E-12	Q5	B-8		
D1305	E-12	Q6	B-7		
D1306	H-12	Q7	B-8		
D1307	C-11	Q8	B-8		
D1308	D-11	Q55	D-5		
D1309	D-11	Q61	C-6		
D1310	F-11	Q62	B-6		
D1311	E-11	Q71	D-6		
D1312	E-11	Q72	C-6		
D1313	D-10	Q1001	G-10		
D1314	D-10	Q1006	G-10		
D1315	C-12	Q1007	G-9		
D1316	C-12	Q1008	G-9		
D1317	D-10	Q1051	H-10		
D1318	C-10	Q1201	I-22		
D1385	J-13	Q1202	J-23		
		Q1203	J-23		
IC1	F-7	Q1204	I-13		
IC51	F-5	Q1251	I-20		
IC1001	C-9	Q1301	D-12		
IC1002	E-9	Q1302	G-12		
IC1003	H-9	Q1381	I-11		
IC1004	G-9	Q1382	I-11		
IC1201	H-21	Q1383	C-11		

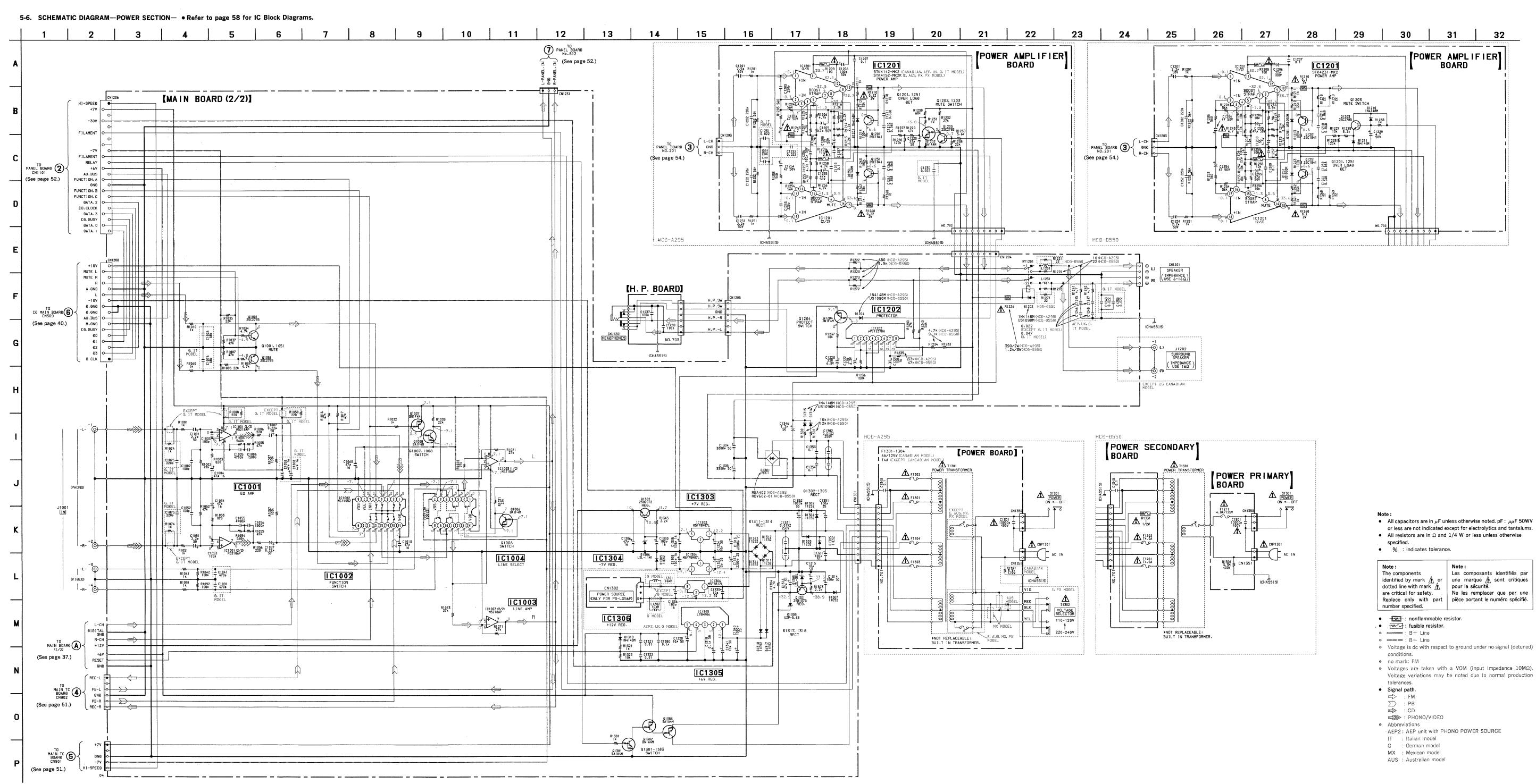
- o : parts extracted from the component side.
- indicates side identified with part number.
- Pattern on the side which is seen.
- Abbreviations
- AEP2: AEP unit with PHONO POWER SOURCE IT : Italian model
- G : German model

- MX : Mexican model
  AUS : Australian model

#### 5-5. PRINTED WIRING BOARDS—TUNER/POWER SECTION— • Refer to page 45 for Semiconductor Lead Layouts.



**-27**-

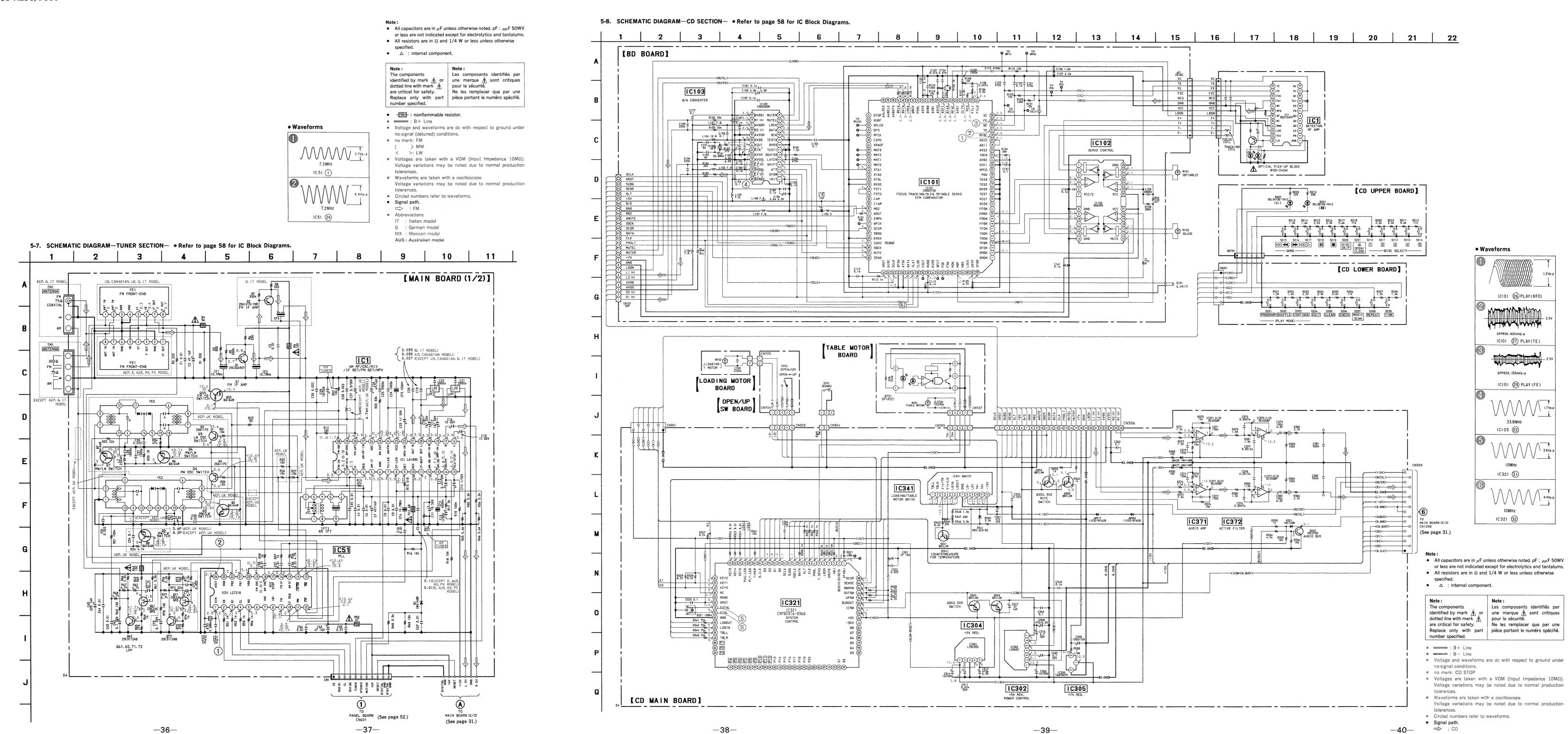


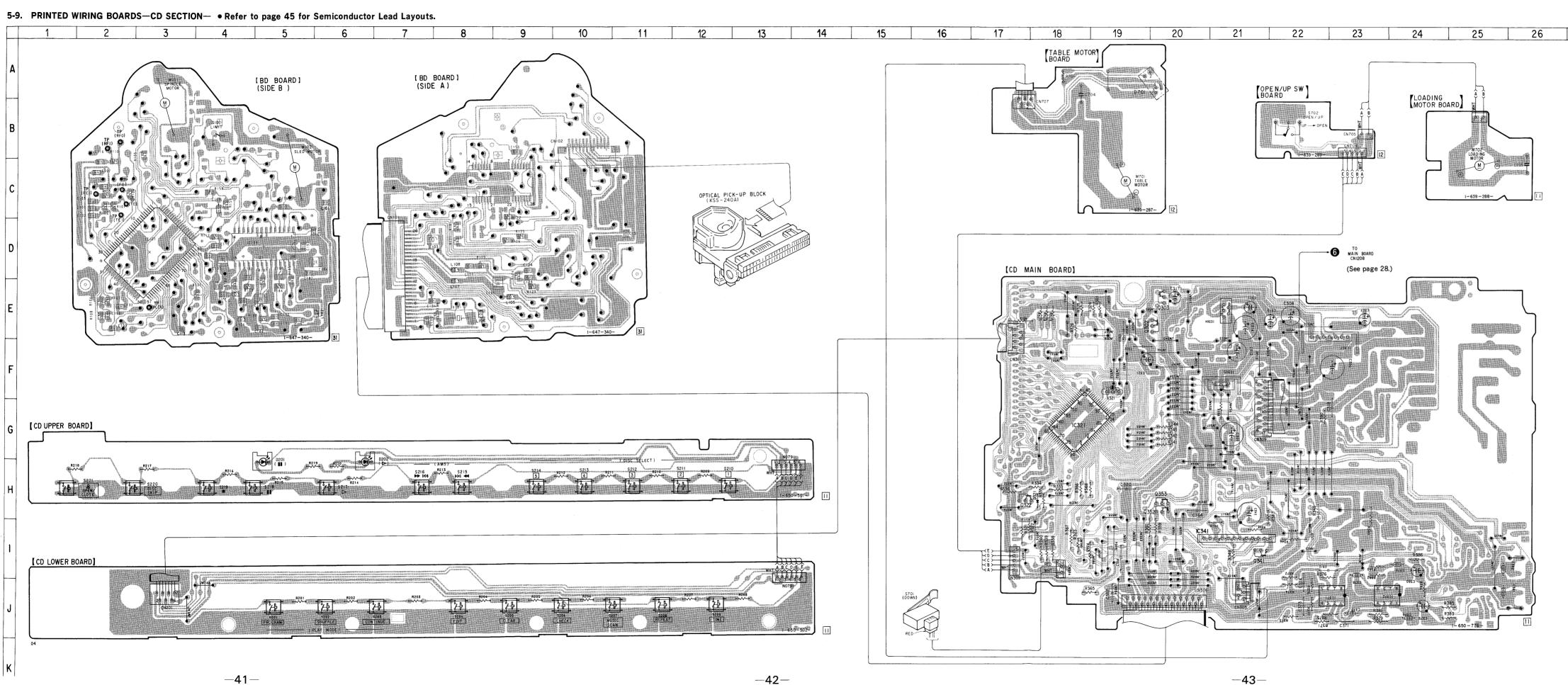
-33-

-32-

-31-

**-35-**



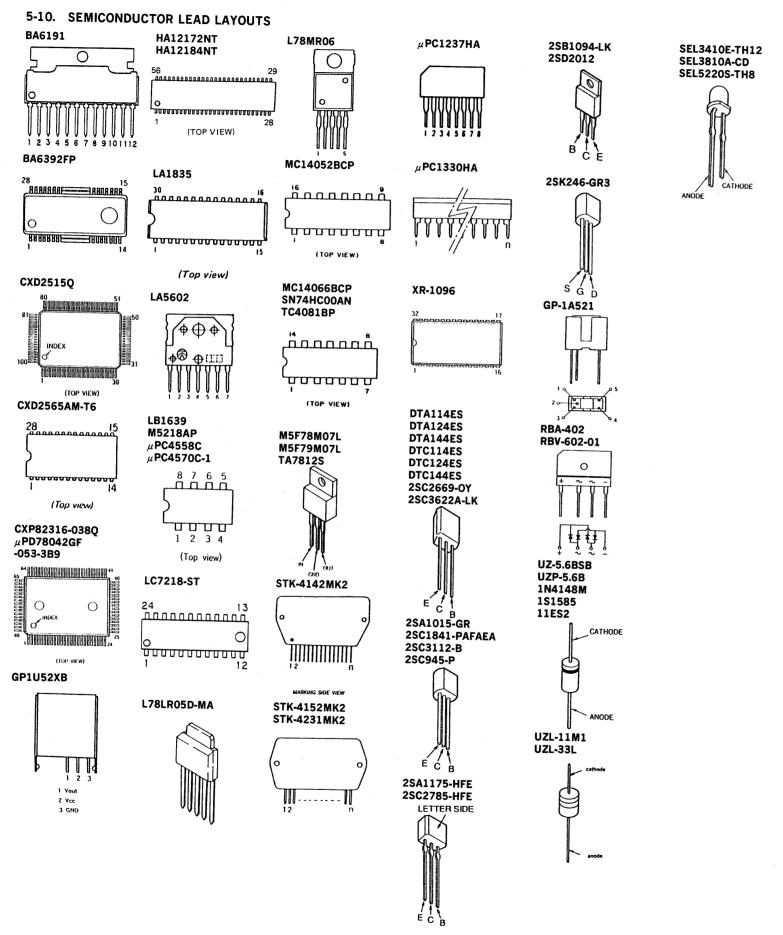


#### Semiconductor Location

Ref. No.	Location
Kei. No.	Location
D201	H-5
D202	H-6
D321	H-17
D341	I-22
D701	A-19
IC101	D-3
IC102	C-8
IC103	D-4
IC302	F-23
IC304	E-20
IC305	F-21
IC321	G-18
IC341	I-20
IC371	J-22
IC372	J-23
JW304	G-22
JW317	H-22
JW427	J-21
JW428	I-23
Q302	E-19
Q303	E-19
Q322	H-17
Q341	I-20
Q351	H-20
Q353	H-20

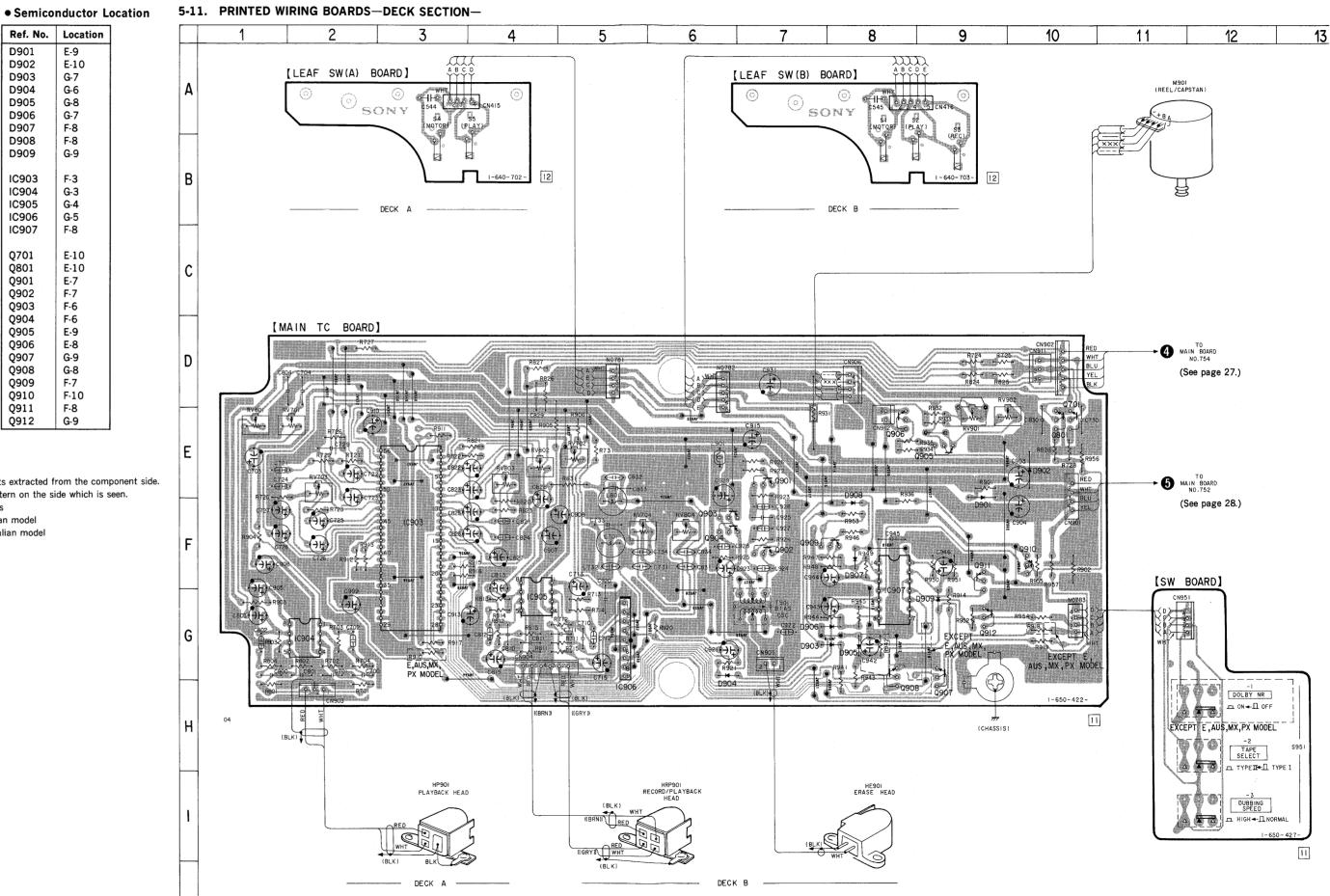
- O : parts extracted from the component side.
  : Through hole.
  : Pattern on the side which is seen.

- (The other layer's patterns are not indicated.)

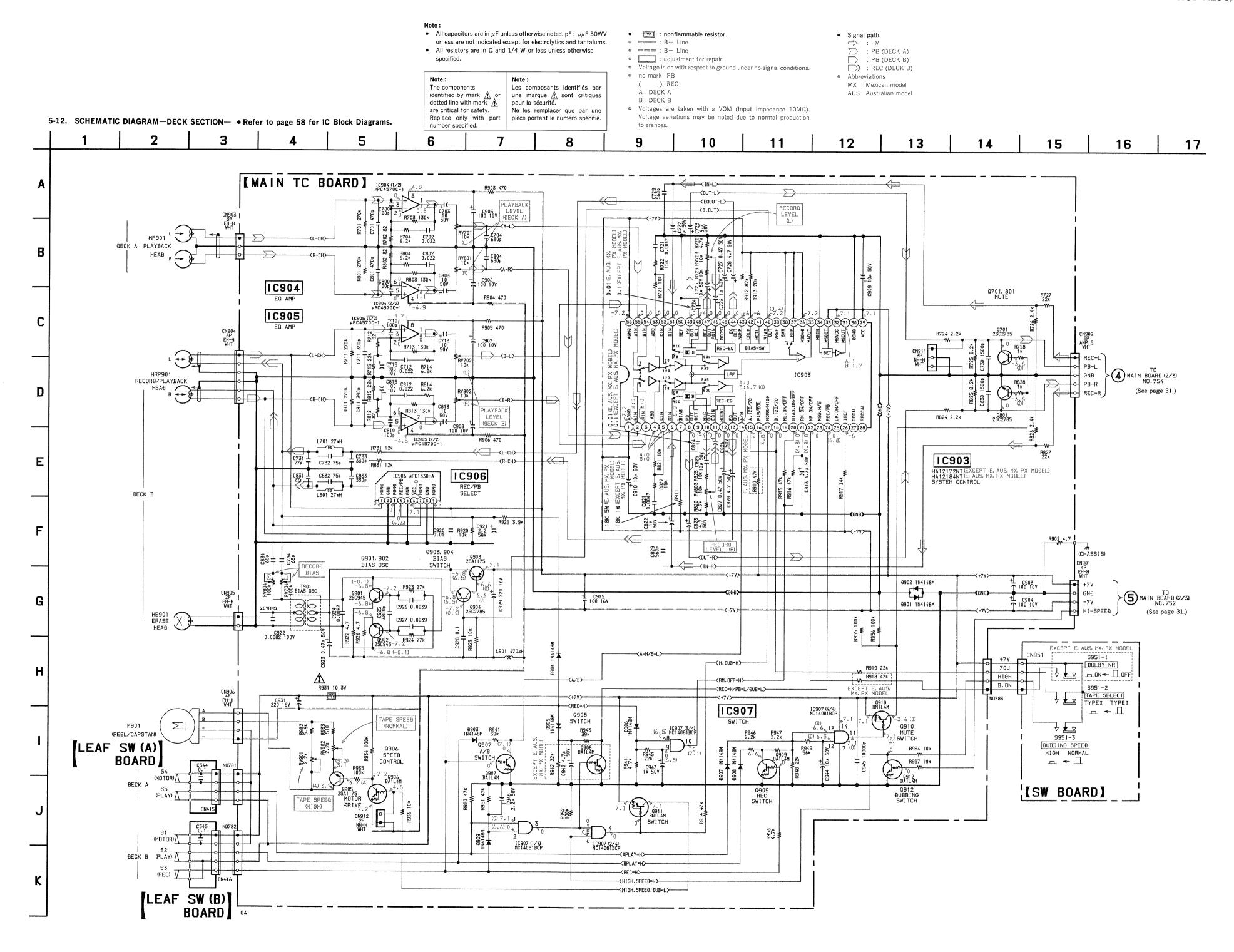


Ref. No.	Location	
D901	E-9	
D902	E-10	
D903	G-7	
D904	G-6	
D905	G-8	
D906	G-7	
D907	F-8	
D908	F-8	
D909	G-9	
IC903	F-3	
IC904	G-3	
IC905	G-4	
IC906	G-5	ĺ
IC907	F-8	
Q701	E-10	
Q801	E-10	
Q901	E-7	
Q902	F-7	
Q903	F-6	
Q904	F-6	
Q905	E-9	
Q906	E-8	
Q907	G-9	
Q908	G-8	
Q909	F-7	
Q910	F-10	
Q911	F-8	
Q912	G-9	

- O— : parts extracted from the component side.
- Pattern on the side which is seen. Abbreviations
- MX : Mexican model AUS: Australian model

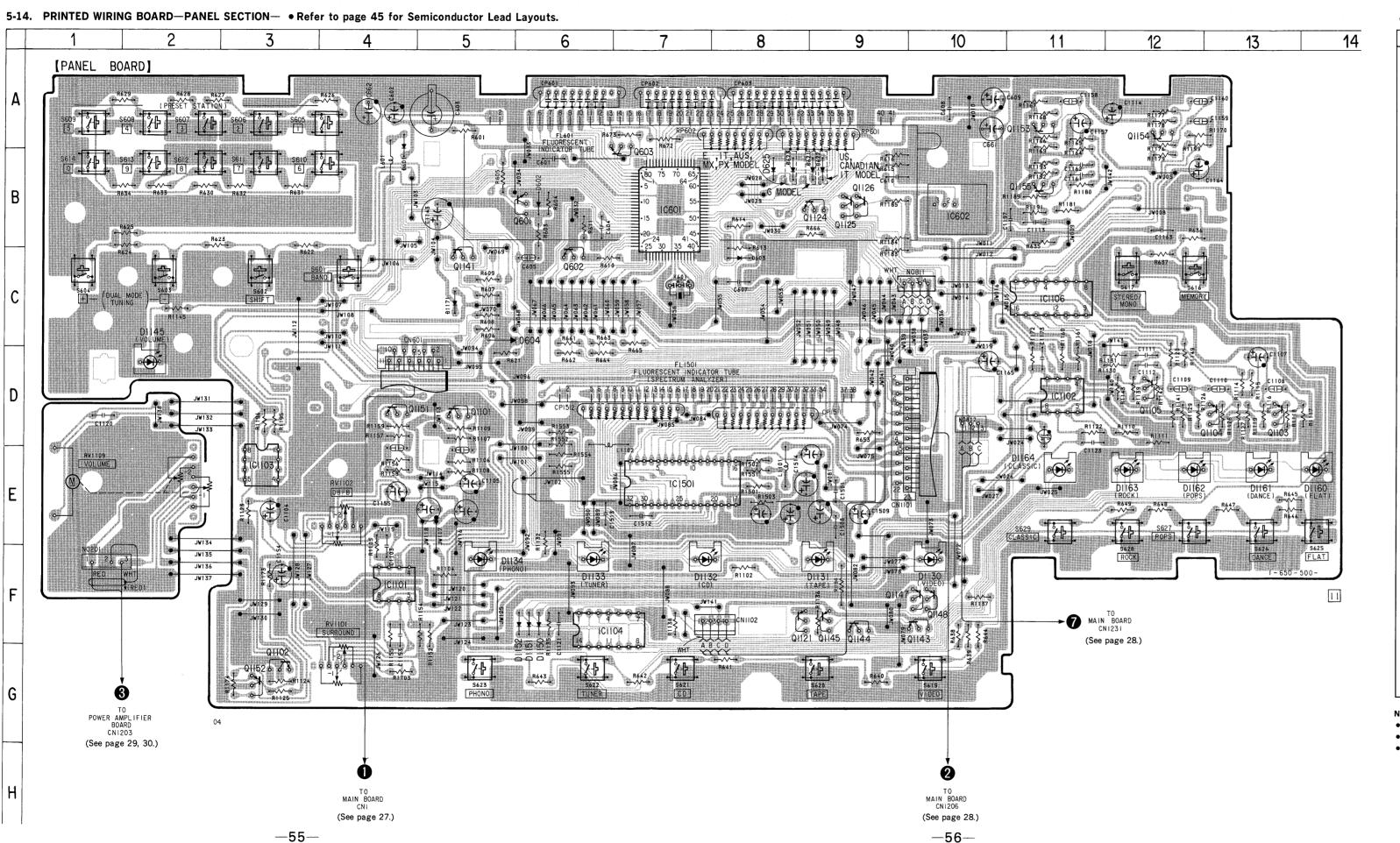


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5-13. SCHEMATIC DIAGRAM—PANEL SECTION— • Refer to page 58 for IC Block Diagrams. 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 [PANEL BOARD] FL1501 FLUORESCENT INDICATOR TUBE (SPECTRUM ANALYZER) T+ 50V 101501 XR-1096 18621 US, CANADIAN. E, IT, AUS, MX, PX MOĐEL 9623 1N4148M C1503 1+ 2-1 ₽625 1N4148M C1509 4.7# 50 O- CONTINER CLOCK
UNDER IN
O- CONTINER IN
STEREO IN
STER (DUAL MODE) VOL.B (E) R626 180 R627 220 R622 R623 120 R624 120 R625 150 R628 270 R629 330 R631 560 R632 820 R633 1.2k 6.8 © FUNCTION B AUB IN SIRCS IN CB.CLBCK (\$) 0.6 DIGITAL GND BISPLAY. BATA. 3 DISPLAY. DATA. 1 MAIN BOARD (1/2) 1 STEREO (See page 37.) ĐO (S1) ÐI (SO) g1121 BN1A4M SW1TCH 5 9603 1N4148M X601 4.19MHz 25 ₹ Ð1130-1134 SEL5220S-TH8C AU BUS OUT (VIĐEO) (TAPE) (CĐ) (TUNĒR) (PHONO) L1101 560#H A SO CK Waveforms 5 | IM1148H R1135 22k A 10601 (34) R1145 Q1143 BATA4M BAIA4M LEĐ ĐRIVE 81145 SEL5220S-TH8C (VOLUME) 200 T 4.2MHz 4.9 BNIF4M MUTE SWITCH Z 5,5.1 r()-(2-(2-ĐATA.1 6.6 91124 BA1F4M 10 601 (35) 1C602 GP1U52XB CĐ.BUSY CÐ.CLOCK IC602 L C1197 FUNCTION.C • All capacitors are in  $\mu$ F unless otherwise noted. pF :  $\mu\mu$ F 50WV or less are not indicated except for electrolytics and tantalums. IC1103 MOTOR ORIVE (VOLUME) AU.BUS O TO MAIN BOARD (2/2) (2/2) All resistors are in  $\Omega$  and 1/4 W or less unless otherwise RELAY (See page 31.) R1184 47k WL 81183 R1185 △ : internal component. • : B+ Line MULTI.CONT C FILAMENT Voltage and waveforms are dc with respect to ground under IC1102 GEQ AMP IC1101 no-signal (detuned) conditions. no mark: FM 1C1101 (1/2) M5218P C1104 2.2≠ 50 R1110 0 6 4 ullet Voltages are taken with a VOM (Input Impedance  $10M\Omega$ ). HC14032 HC16032 HC1 HI-SPEEÐ O R1123 2.2k R1102 5.6k Voltage variations may be noted due to normal production L-CH GND R-CH 3 POWER AMPLIFIER BOARD CN1203 tolerances. R1125 22k Waveforms are taken with a oscilloscope. (See page 33, 34.) 01102 25C3622A MUTE 172 M Voltage variations may be noted due to normal production R1103 15k tolerances. Circled numbers refer to waveforms. L-PANEL. IN Signal path. TO MAIN BOARD (2/2) (7) < R-PANEL.IN RVI101 100k/100k SURROUNÐ RV1102 100k/100k (DBFB) Abbreviations (See page 32.) G : German model IT : Italian model R1172 22k MX : Mexican model AUS: Australian model R1152 5.6k R1173 2.2k 1C1101 (2/2) H5218P 01153 25C2765 2502785 250 01154 25C2785 01105 25C2785 01155 25C2785 ---GAIN CONTROL--GAIN CONTROL-

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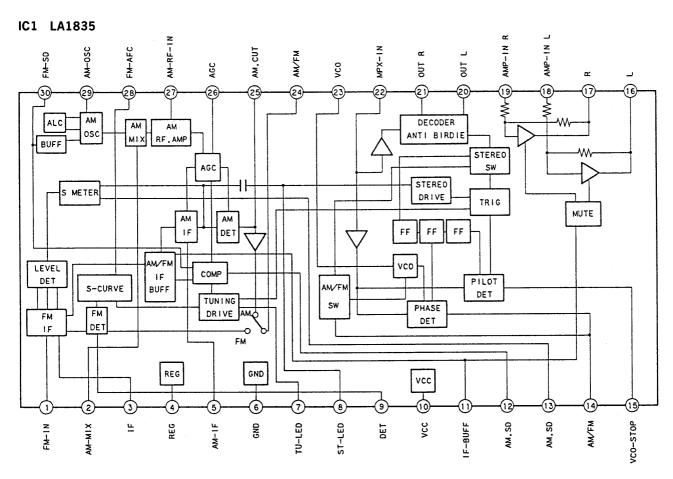
#### Semiconductor Location

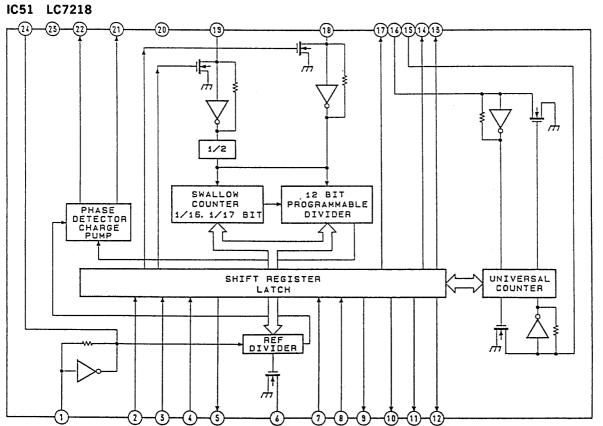
• Semico	nductor	Lo
Ref. No.	Location	╝
D601 D602 D603 D604 D621 D622 D623 D625 D1130 D1131 D1132 D1133 D1145 D1150 D1151 D1152 D1160 D1161 D1162 D1163 D1164 D1171	B-4 B-6 C-8 B-8 B-8 B-8 F-10 F-9 F-7 F-6 F-6 F-6 E-14 E-12 E-12 E-12	
IC601 IC602 IC1101 IC1102 IC1103 IC1104 IC1106 IC1501	B-7 B-10 F-4 D-11 E-3 F-6 C-11 E-7	
Q601 Q602 Q603 Q1101 Q1102 Q1103 Q1104 Q1105 Q1121 Q1124 Q1125 Q1126 Q1141 Q1143 Q1144 Q1145 Q1147 Q1148 Q1151 Q1152 Q1153 Q1153 Q1154 Q1155	B-6 C-6 B-7 D-5 G-3 D-13 D-12 F-8 B-9 C-5 F-10 F-9 F-10 D-4 G-3 A-11 A-12 B-11	

#### ote :

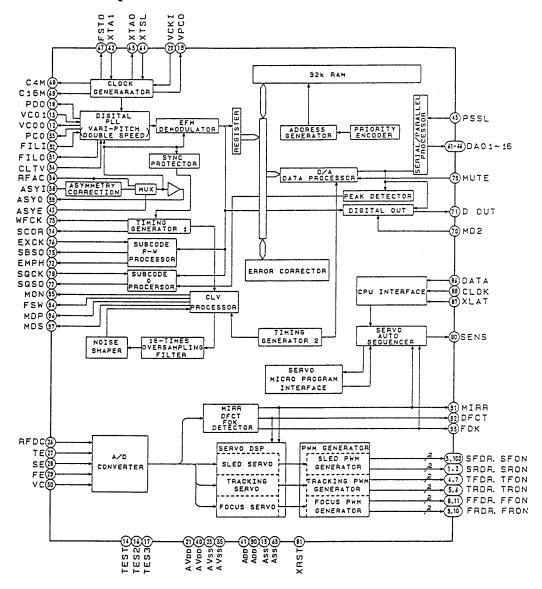
- O— : parts extracted from the component side.
- Pattern on the side which is seen.
- Abbreviations
- G : German model
- IT : Italian model
- MX : Mexican model
- AUS: Australian model

#### • IC Block Diagrams

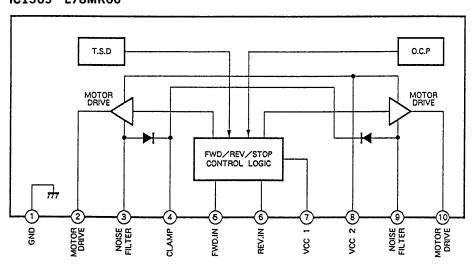


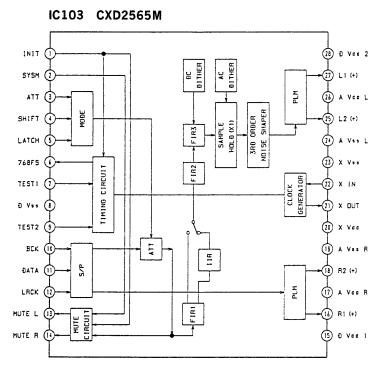


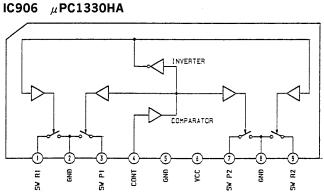
#### IC101 CXD2515Q



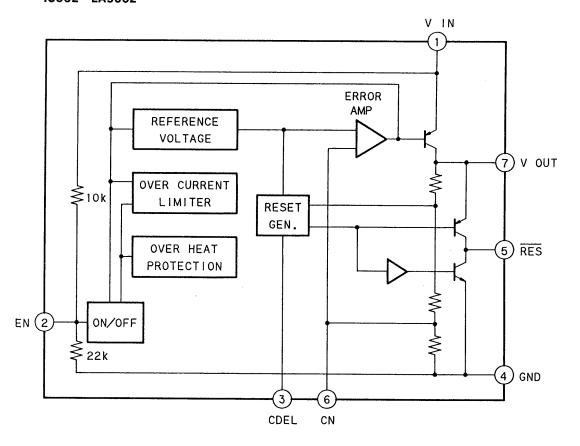
#### IC304 L78LR05 IC1305 L78MR06



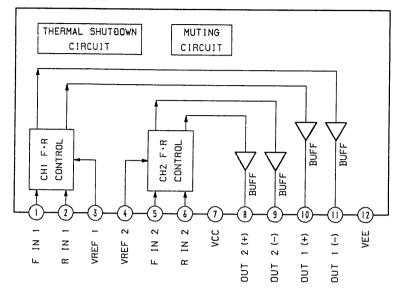




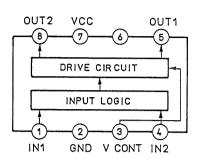
#### IC302 LA5602



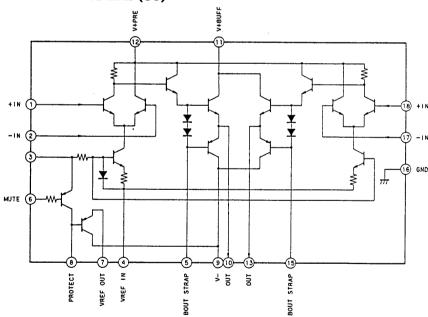
#### IC341 BA6191



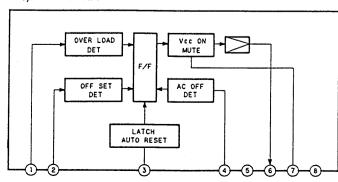
#### IC1103 LB1639



IC1201 STK4142-MK2 (CND, AEP, UK, G, IT) STK4152-MK2K (E, AUS, MX, PX) STK4231-MK2 (US)



### IC1202 μPC1237HA



### 5-15. PIN DESCRIPTION

### • IC601 μPD78042GF-053-3B9

μPD/8042GF-033-				
Pin Name	1/0	Pin Description		
7G	0	FL tube digit output		
6G	0	FL tube digit output		
5G	О	FL tube digit output		
4G	О	FL tube digit output		
3G	О	FL tube digit output		
2G	О	FL tube digit output		
1G	О	FL tube digit output		
VDD	_	Microcomputer power (5V)		
CL	О	Serial clock output to LC7218 (PLL IC).		
SO/IF COUNT NG	0	Serial data output to LC7218 (PLL IC).		
SI	I	Serial data input from LC7218 (PLL IC).		
CE/TIMER CLOCK	I	Chip enable input from LC7218 (PLL IC).		
TUNED IN	I	Modulation signal from tuner block. (L···Field)		
STEREO IN	I	Stereo signal from tuner block. (L···FM STEREO received)		
MUTING	0	Audio mute (L: Mute)		
AUX. OUT		Not used.		
RESET		Microcomputer reset pin		
FUNCTION A	0	Function control		
FUNCTION B	0	Function control		
AVSS		A/D GND for key input.		
DISPLAY. DATA. 3	I	CD display data bit 3		
DISPLAY, DATA, 2	I	CD display data bit 2		
DISPLAY. DATA. 1	I	CD display data bit 1		
DISPLAY. DATA. 0	I	CD display data bit 0		
AUB. OUT	0	AU BUS output		
RELAY	0	Relay control (H: System ON)		
KEY IN1	I	Key input (A/D change line 1)		
KEY IN0	I	Key input (A/D change line 0)		
AVDD	_	A/D power for key input (5V)		
AVREF		A/D reference voltage (5V)		
CD. BUSY	I	At H, CD is Active. (At H, tuner is fundamentally not operated.)		
		Not used.		
GND		Microcomputer GND		
X1	_	Crystal connection pin for Main•clock oscillator.		
X2	<u> </u>	Crystal connection pin for Main•clock oscillator.		
VIDEO. LED	0	Video function LED		
TAPE. LED	0	Tape function LED		
CD. LED	0	CD function LED		
TUNER. LED	О	Tuner function LED		
PHONO. LED	0	Phono function LED		
EQ. C	0	Preset • equalizer control		
EQ. B	О	Preset•equalizer control		
EQ. A	0	Preset • equalizer control		
HOLD	I	Power cut detection pin (Normally: H, AC no connect: L)		
	7G 6G 5G 4G 3G 2G 1G VDD CL SO/IF COUNT NG SI CE/TIMER CLOCK TUNED IN STEREO IN MUTING AUX. OUT RESET FUNCTION A FUNCTION B AVSS DISPLAY. DATA. 3 DISPLAY. DATA. 2 DISPLAY. DATA. 1 DISPLAY. DATA. 1 DISPLAY. DATA. 1 MESET FUNCTION B AVSS DISPLAY. DATA. 1 DISPLAY. DATA. 1 TOISPLAY. DATA. 1 TOISPLAY. DATA. 1 TOISPLAY. DATA. 0 AUB. OUT RELAY KEY IN1 KEY IN0 AVDD AVREF CD. BUSY — GND X1 X2 VIDEO. LED TAPE. LED CD. LED TUNER. LED PHONO. LED EQ. C EQ. B EQ. A	7G         0           6G         0           5G         0           4G         0           3G         0           2G         0           1G         0           VDD         -           CL         0           SO/IF COUNT NG         0           SI         I           CE/TIMER CLOCK         I           TUNED IN         I           STEREO IN         I           MUTING         0           AUX. OUT         -           RESET         -           FUNCTION A         0           FUNCTION B         0           AVSS         -           DISPLAY. DATA. 3         I           DISPLAY. DATA. 1         I           DISPLAY. DATA. 0         I           AUB. OUT         0           RELAY         0           KEY IN1         I           KEY IN1         I           AVREF         -           CD. BUSY         I           -         -           GND         -           X1         -           GND         -		

Pin No.	Pin Name	1/0	Pin Description		
. 45	CD. CLOCK	I	CD display data clock		
46	SIRCS IN	I	SIRCS input		
47	AUB. IN	I	AU BUS input		
48	_	_	Connect to GND.		
49	FUNCTION. C		Not used.		
50	VOL. B	0	Volume control (VOL DOWN)		
51	VOL. A	0	Volume control (VOL UP)		
52	VDD		Microcomputer power (5V)		
53			Not used.		
54	DIODE. IN2	I	Distination·model discrimination input * 1		
55	DIODE. IN1	I	Distination • model discrimination input * 1		
56	S0	0	FL tube segment output		
57	S1	0	FL tube segment output		
58	S2	0	FL tube segment output		
59	S3	0	Distination•model discrimination output * 1		
60	S4	0	Distination • model discrimination output * 1		
61	S5	0	Distination·model discrimination output * 1		
62	S6	0	FL tube segment output		
63	S7	0	FL tube segment output		
64	S8	0	FL tube segment output		
65	S9	0	FL tube segment output		
66	S10	0	FL tube segment output		
67	S11	0	FL tube segment output		
68	S12	0	FL tube segment output		
69	S13	0	FL tube segment output		
70	S14	0	FL tube segment output		
71	V. LOAD	_	Minus voltage for FL tube.		
72	S15	0	FL tube segment output		
73	S16	0	FL tube segment output		
74	S17	0	FL tube segment output		
75	S18	0	FL tube segment output		
76	S19	0	FL tube segment output		
77	S20	0	FL tube segment output		
78	VOL. LED	0	Volume LED output		
79	9G	_	Not used.		
80	8G	0	FL tube digit output		

#### \* 1

#### [DIODE MATRIX] (Pin No. is IC601's pin No.)

LDIODE	*** * ****	(1 111 110. 10	10001 5 pr
Output Input	Pin@	Pin⑩	Pin <sup>®</sup>
Pin <sup>55</sup>	A	С	0
Pin <sup>5</sup>	В	×	×

 $\times$ : Not use for diode.

 $\bigcirc$ : Use for diode.

#### (DISTINATION SELECT)

	G	US, CND	IT	E, AUS, MX, PX	
A	0	×	×	×	
В	×	0	0	×	
С	×	×	0	0	

Abbreviations

G: German model
CND: Canadian model
IT: Italian model
AUS: Australian model
MX: Mexican model

# SECTION 6 EXPLODED VIEWS

#### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE)... (RED)
↑ ↑

Parts Color Cabinet's Color

• Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark  $\triangle$  or dotted line with mark.  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque A sont critiques pour la sécurité.
Ne les remplacer que par une pièce

Abbreviations

AEP1: AEP unit with no PHONO POWER

SOURCE

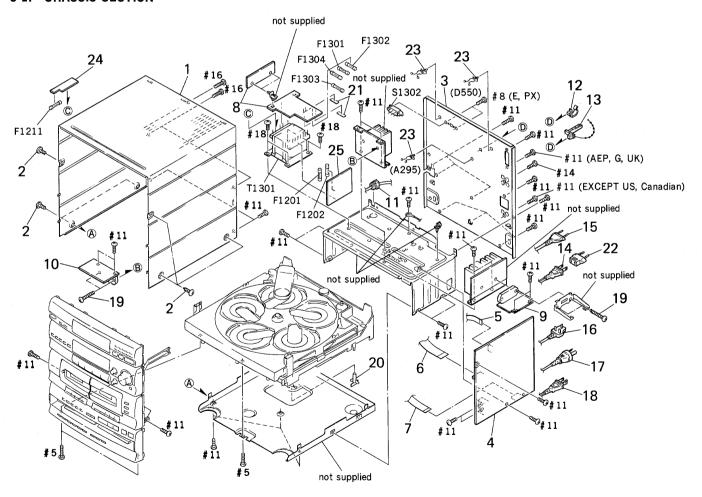
portant le numéro spécifié.

AEP2 : AEP unit with PHONO POWER

SOURCE

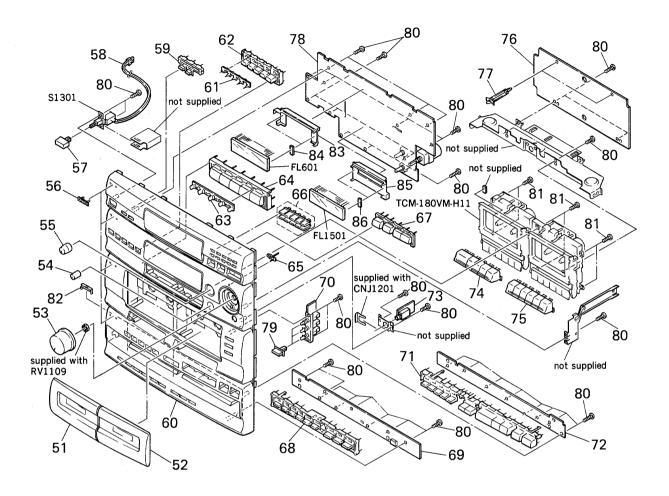
IT : Italian model
G : German model
MX : Mexican model
AUS : Australian model

#### 6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	4-962-724-11	CASE (CDM)		* 12	- <del></del>	HOOK (EXCEPT UK)	
2	3~363-099-01	SCREW (CASE	3 TP2)	13	4-956-370-12	BAND, PLUG FIXED (AUS, UK)	
* 3	4-962-738-01	PANEL, BACK	(UK)	<u></u> <b>14</b>		CORD, POWER (E, MX, PX)	
* 3	4-962-738-11	PANEL, BACK	(Canadian)	<u>_</u> 15		CORD, POWER (AEP, G, IT)	
* 3	4-962-738-31	PANEL, BACK	(AEP2)	<u>16</u> 16		CORD, POWER (UK)	
* 3	4-962-738-41	,	()	<u> </u>	1-696-848-21	CORD, POWER (AUS)	
* 3	4-962-738-51	PANEL, BACK	(US)	<u></u> 18	1-690-609-11	CORD, POWER (US, Canadian)	
* 3	4-962-738-71	PANEL, BACK	(AEP1)	19	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
* 3	4-962-738-81	PANEL, BACK	(G) <sup>1</sup>	20	4-937-945-01	PLATE (TRANSPORT), LOCK	
* 3	4-962-739-01	PANEL, BACK	(E)	* 21	3-701-946-26	LABEL (4A125V), FUSE (Canadian	n)
* 3	4-962-739-11			<u>^</u> 22	1-569-007-11	ADAPTOR, CONVERSION 2P (PX)	
* 3	4-962-739-21	PANEL, BACK	(AUS)	23	4-953-346-01	CLAMP, LEAD	
* 3	4-962-739-31	PANEL, BACK	(PX)	* 24	1-650-485-11	POWER PRIMARY BOARD (D550)	
* 4			COMPLETE (AEP2)	* 25		POWER SECONDARY BOARD (D550)	
* 4	A-4365-925-A	MAIN BOARD,	COMPLETE (E, AUS, MX, PX)	<u></u> <b>♠</b> F1201	1-576-108-11	FUSE (4A/125V) (US)	
* 4	A-4365-937-A		, ,	<u></u> F1202	1-576-108-11	FUSE (4A/125V) (US)	
* 4	A-4369-078-A	MAIN BOARD,	COMPLETE (UK)	<b>⚠</b> F1211	1-576-108-11	FUSE (4A/125V) (US)	
* 4			COMPLETE (AEP1)	<b>⚠</b> F1301	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Cana	adian)
* 4	A-4369-098-A		7 7	<b>⚠</b> F1301	1-576-108-11	FUSE (4A/125V) (Canadian)	
* 4	A-4369-258-A	MAIN BOARD,	COMPLETE (Canadian)	<u></u> <b>⚠</b> F1302	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Cana	adian)
* 4	A-4369-605-A					FUSE (4A/125V) (Canadian)	
5	1-590-576-11		, ,	<b>⚠</b> F1303	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Cana	adian)
6			YPE) (23 CORE)	<u></u> <b>♠</b> F1303	1-576-108-11	FUSE (4A/125V) (Canadian)	
7	1-765-234-11	CORD, CONNEC	TION (17 CORE)	<u></u> ∱F1304	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Cana	adian)
* 8	1-650-434-11	POWER BOARD	(A295)	<b>⚠</b> F1304	1-576-108-11	FUSE (4A/125V) (Canadian)	
* 9			IER BOARD, COMPLETE (US)	<u></u> ∆S1302	1-570-046-21	SWITCH, VOLTAGE CHANGE	
* 10	A-4365-902-A		IER BOARD, COMPLETE			(VOLTAGE SELECTOR) (E, PX)	
		(Canadian, AE				TRANSFORMER, POWER (AEP, UK, G, 1	
* 10	A-4365-923-A		IER BOARD, COMLETE			TRANSFORMER, POWER (E, AUS, MX, F	PX)
		(E, AUS, MX, PX		<u>↑</u> T1301	1-423-916-11	TRANSFORMER, POWER (US)	
* 10			IER BOARD, COMPLETE (G, IT)	<u></u> ↑T1301	1-423-917-11	TRANSFORMER, POWER (Canadian)	
* 11	3-703-244-00		4), CORD AEP, UK, G, IT)				
11	3-703-571-11	BUSHING (S)	(4516), CORD (E, AUS, MX, PX)				

## 6-2. FRONT PANEL SECTION

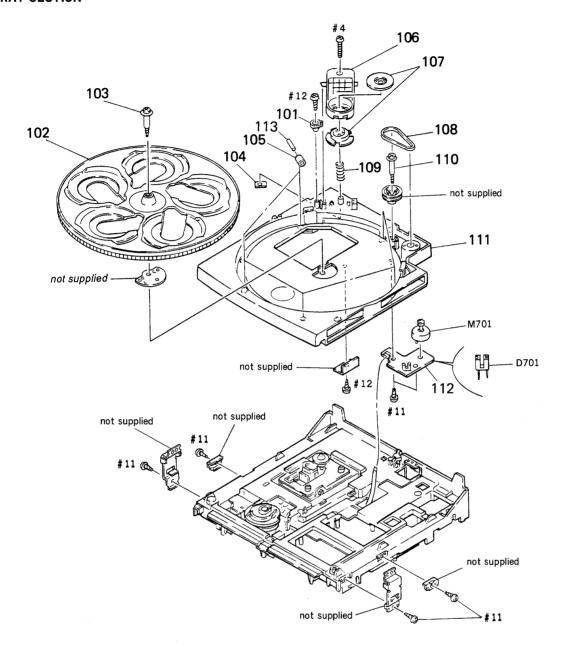


mark <u>A</u> or dotted line with mark. \Lambda are critical for safety. Replace only with part number specified.

The components identified by Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

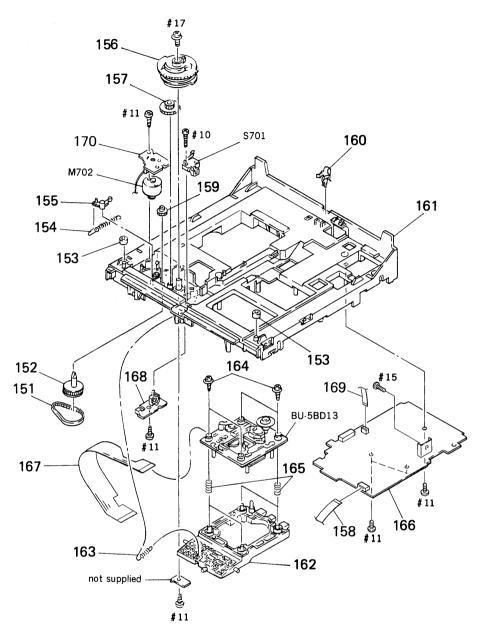
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description Remark
51	X-4944-276-1	LID (A) ASSY, CASSETTE		* 73	1-650-503-11	H. P. BOARD
52	X-4944-277-1	LID (B) ASSY, CASSETTE		74	4-962-663-01	BUTTON (MD-A)
53	4-955-635-02	KNOB (V)		75	4-962-664-01	BUTTON (MD-B)
54	4-955-744-01	KNOB (BA)		* 76		MAIN TO BOARD, COMPLETE (E, AUS, MX, PX)
55	4-962-703-01	KNOB (SUR)		* 76		MAIN TC BOARD, COMPLETE (US, Canadian, AEP, UK)
56	4-962-708-11	EMBLEM (4-A), SONY				(ob) variation, that, one
57	4-930-783-11	BUTTON (PO)		* 76	A-4371-005-A	MAIN TC BOARD, COMPLETE (G, IT)
* 58	1-690-708-11	CORD (WITH CONNECTOR) (D550)		* 77		HOLDER. PC BOARD
58	1-765-058-11	CORD (WITH CONNECTOR) (A295)		* 78		PANEL BOARD, COMPLETE (AEP, UK)
59	4-962-660-01	BUTTON (MEMORY)		* 78		PANEL BOARD, COMPLETE (E, AUS, MX, PX)
		· · ·		* 78		PANEL BOARD, COMPLETE (D550)
60	X-4944-680-1	PANEL ASSY, FRONT (A295)				
60	X-4944-683-1	PANEL ASSY, FRONT (D550)		* 78	A-4369-096-A	PANEL BOARD, COMPLETE (IT)
61	4-962-677-01	INDICATOR (SELECT 5)		* 78		PANEL BOARD, COMPLETE (Canadian)
62	4-962-678-01	BUTTON (SELECT 5)		* 78		PANEL BOARD, COMPLETE (G)
63	4-962-680-01	INDICATOR (FU)		79	4-964-288-01	BUTTON (DDT-3)
				80	4-951-620-01	SCREW (2. 6X8), +BVTP
64	4-962-681-01	BUTTON (FU)				
65	4-962-682-01	INDICATOR (VO)		81	4-951-620-11	SCREW (2.6X10), +BVTP
66	4-962-676-01	BUTTON (PRESET)		82	4-962-705-01	CHASSIS, HOLDER
67	4-962-661-01	BUTTON (BAND)		* 83	4-955-792-01	HOLDER (5M), FL TUBE
68	4-962-666-01	BUTTON (PROGRAM)		* 84	4-949-935-01	CUSHION (FL)
				* 85	4-962-699-01	HOLDER, FL TUBE
* 69	1-650-502-11	CD LOWER BOARD				
* 70	1-650-504-11	SW BOARD		* 86	4-949-935-21	CUSHION (FL)
71	X-4944-347-1	BUTTON (CDM) ASSY		FL601	1-517-259-11	INDICATOR TUBE, FLUORESCENT
* 72	1-650-501-11	CD UPPER BOARD		FL1501	1-517-260-11	INDICATOR TUBE, FLUORESCENT
						SWITCH, PUSH (AC POWER) (1 KEY) (POWER)

## 6-3. TRAY SECTION



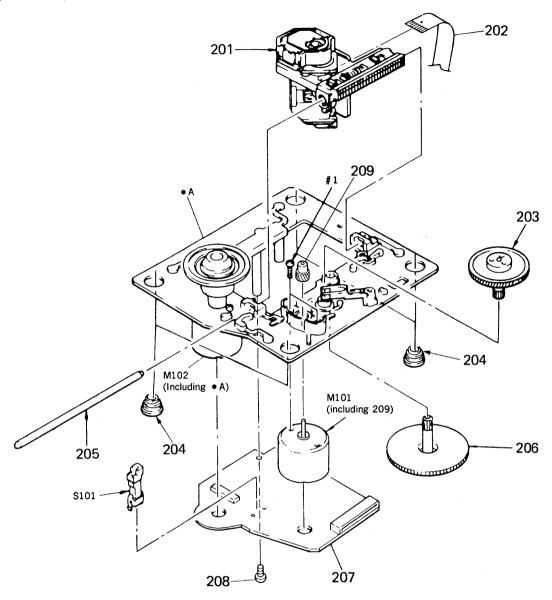
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
				***************************************			
* 101	4-949-226-01	PLATE, LOCK		109	4-926-395-01	SPRING, COMPRESSION	
* 102	4-926-383-01	TABLE (B), DISC		110	4-923-597-01	SCREW, STEP	
103	4-926-384-01	SCREW. STEP		111	4-955-787-41	TABLE, DISC	
* 104		BRACKET (ADJUSTMENT)		* 112	1-638-729-11	TABLE MOTOR BOARD	
105	X-4924-457-1			113	4-934-376-01	SHAFT (ROLLER)	
* 106	4-930-506-02	BRACKET (PRESS PULLEY)		D701	8-719-970-19	PHOTO SENSOR GP-1A521	
* 107	1-452-538-11	MAGNET		M701	A-4604-849-A	MOTOR ASSY, ROTARY	
108	4-926-399-01	BELT					

## 6-4. CD CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-944-490-01	BELT (TIMING)		* 162	4-934-373-01	BRACKET (BU)	
152	X-4941-529-1	PULLEY ASSY		163	4-937-911-01	SPRING, TENSION	
* 153	4-951-619-01	CUSHION (A)		164	4-933-134-01	SCREW (+PTPWH M2.6X6)	
154	4-924-412-01	SPRING (B), TENSION		165	4-958-593-01	SPRING (BU), COMPRESSION	
155	4-917-519-11	LEVER, SET		* 166	A-4365-928-A	CD MAIN BOARD, COMPLETE	
156	4-934-391-01	GEAR (LOADING A)		167	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
157	4-934-381-01	GEAR (LOADING C)		* 168	1-638-731-11	OPEN/UP SW BOARD	
158	1-765-195-11	WIRE (FLAT TYPE) (7 CORE)		169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
159	4-934-375-01	GEAR (LOADING B)		* 170	1-639-288-11	LOADING MOTOR BOARD	
* 160	4-943-996-06	SPRING, LEAF		M702	A-4604-847-A	MOTOR ASSY, LOADING	
* 161	4-943-997-31	CHASSIS		S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR)	(DOWN)

# 6-5. OPTICAL PICK-UP BLOCK (BU-5BD13)

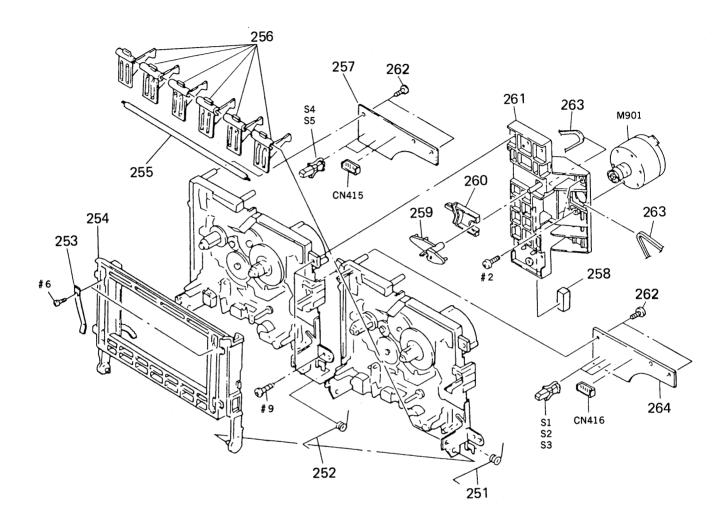


The components identified by mark A or dotted line with mark. A are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque <u>A</u> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

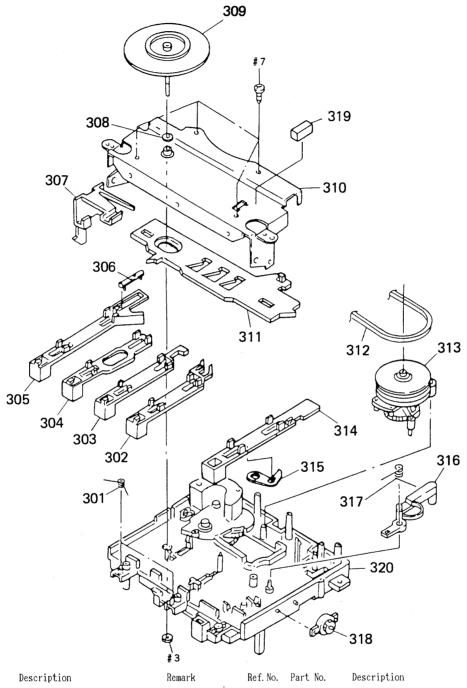
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
<u>^</u> 201	8-848-144-11	DEVICE, OPTICAL KSS-240A	-	* 207	A-4673-064-A	BD BOARD, COMPLETE	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)		208	4-951-620-01	SCREW (2.6X8), +BVTP	
203	4-917-567-01	GEAR (M)		209	4-917-566-01	GEAR (S)	
204	4-951-940-01	INSULATOR (BU)		S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
205	4-917-565-01	SHAFT, SLED		M101	X-4917-504-1	MOTOR ASSY (SLED)	
206	4-917-564-01	GEAR (P), FLATNESS		M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPIND	LE MOTOR)

# 6-6. MECHANISM DECK SECTION 1 (TCM-180VW-H11)



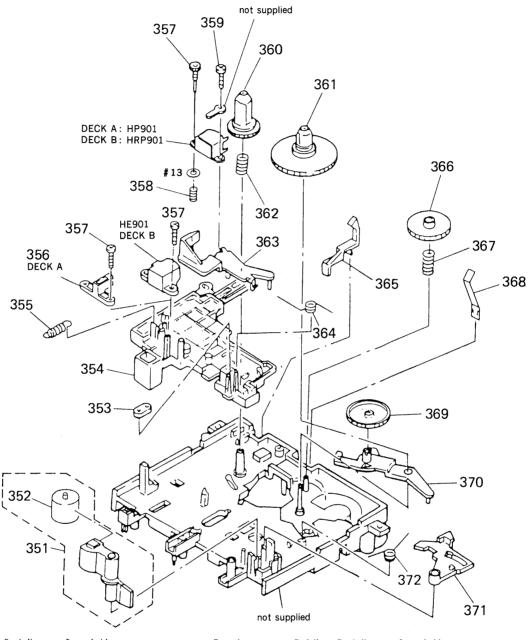
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-358-287-01	SPRING (LOADING A), TORSION		262	4-951-620-01	SCREW (2.6X8), +BVTP	
252	3-358-229-01	SPRING (LOADING), TORSION		263	3-364-777-01	BELT (WH)	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF		* 264	1-640-703-11	LEAF SW (B) BOARD	
254	3-358-266-02	HOLDER, CASSETTE		* CN415	1-568-942-11	PIN, CONNECTOR 4P	
255	3-371-917-01	SHAFT (BUTTON SHAFT 4)		* CN416	1-568-943-11	PIN, CONNECTOR 5P	
256	3-369-335-01	LEVER (BUTTON BASE F)		M901	X-3362-377-1	MOTOR (WH) ASSY	
* 257	1-640-702-11	LEAF SW (A) BOARD		S1	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK B	)
* 258	3-358-289-01	SPACER (VIBRATION PROOF MAT)		S2	1-571-736-11	SWITCH, LEAF (PLAY) (DECK B)	
259	3-358-203-01	LEVER (TRIGGER)		S3	1-571-736-11	SWITCH, LEAF (REC) (DECK B)	
260	3-358-202-01	SLIDER (TRIGGER)		S4	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK A	)
* 261	3-363-930-01	BRACKET (JOINT BASE)		S5	1-571-736-11	SWITCH, LEAF (PLAY) (DECK A)	

# 6-7. MECHANISM DECK SECTION 2 (TCM-180VM-H11)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	3-358-232-01	SPRING (S-P F-R), TORSION		* 311	3-358-249-01	SLIDER (LOCK PLATE)	
302	3-358-258-01	SLIDER (REW)		312	3-358-230-01	BELT (A1)	
303	3-358-257-01	SLIDER (FF)		313	X-3358-202-1	LEVER (FR ARM) ASSY	
304	3-358-256-01	SLIDER (STOP/EJECT)		314	3-358-259-01	SLIDER (REC) (DECK B)	
305	3-358-260-01	SLIDER (PAUSE)		* 315	3-358-204-01	LEVER (REC SAFETY)	
* 306	3-358-226-01	LEVER (PAUSE LEVER)		316	3-358-286-01	LEVER (MOTOR LEVER)	
* 307	3-358-261-02	SLIDER (HOLDER LOCK)		317	3-358-214-01	SPRING (LOCK), TORSION	
308	3-701-437-01	WASHER		317	3-358-233-01	SPRING (REC-LOCK), TORSION (D	ECK B)
309	X-3358-205-1	FLYWHEEL (A) ASSY (DECK B)		318	3-319-224-51	DAMPER, SMALL	
309	X-3366-859-1	FLYWHEEL (D) ASSY (DECK A)		* 319	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
* 310	X-3358-208-1	BRACKET (B) ASSY		320	X-3358-207-2	CHASSIS (A) ASSY	

# 6-8. MECHANISM DECK SECTION 3 (TCM-180VM-H11)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY	. —	364	3-358-228-01	SPRING, TORSION	
352	3-578-143-11	PINCH ROLLER		* 365	3-358-255-01	LEVER (GB LEVER) (DECK B)	
* 353	3-358-215-01	BUSHING (WIRE KIT RETAINER)		* 366	3-358-224-01	GEAR (FF GEAR)	
354	3-358-265-01	SLIDER (HEAD PC BOARD A)		367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
355	3-358-217-01	SPRING, TENSION		368	3-358-227-01	SPRING, LEAF	
* 356	3-363-931-01	GUIDE, TAPE (DECK A)		* 369	3-358-284-01	GEAR (TU GEAR)	
357	3-358-288-11	SCREW (T), AZIMUTH		* 370	3-358-252-01	LEVER (TU ARM)	
358	3-358-234-01	SPRING (AZIMUTH), COMPRESSION		* 371	3-358-253-01	LEVER (SHUT-OFF LEVER)	
359	3-358-288-01	SCREW (T), AZIMUTH		372	3-358-243-01	SPRING (TU-SHUT), TORSION	
360	3-358-248-01	GEAR (SUPPLY REEL)		HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK	3)
361	X-3358-203-1	TABLE (T) ASSY, REEL		HP901	1~543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
362		SPRING (SUPPLY). COMPRESSION				HEAD, MAGNETIC (REC/PB) (DECK	B)
* 363		LEVER (TENSION DETECTION ARM)				(120,12)	-,

# SECTION 7 ELECTRICAL PARTS LIST

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS

All resistors are in ohms. METAL: Metal-film resistor.

 $\begin{tabular}{ll} \begin{tabular}{ll} \beg$ 

Items marked "\*" are not stocked since
 they are seldom required for routine service. G
 Some delay should be anticipated MX
 when ordering these items.

SEMICONDUCTORS

In each case,  $u:\mu$ , for example:

 $uA \dots : \mu A \dots uPA \dots \mu PA \dots$ 

uPB.: μPB.: uPC.: μPC.: μPD.: μPD.:• CAPACITORS

uF: μF ● COILS When indicating parts by reference number, please include the board.

uH: μH

• Abbreviations

 $\ensuremath{\mathtt{AEP1}}$  :  $\ensuremath{\mathtt{AEP}}$  unit with no PHONO POWER

SOURCE

AEP2 : AEP unit with PHONO POWER SOURCE

IT : Italian model
G : German model
MX : Mexican model
AUS : Australian model

The components identified by mark  $\triangle$  or dotted line with mark.  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque <u>A</u> sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

	Part No.	escription		Re	mark	Ref. No.	Part No.	Description			Rem	ark
*	A-4673-064-A	BD BOARD, COMPI			, <u> </u>	C195 C196 C197	1-163-005-11	CERAMIC CHIP	0. 1uF 470PF 0. 1uF		10%	25V 50V 25V
		< CAPACITOR >						< CONNECTOR >				
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V			COMMEDIAL >				
C101		CERAMIC CHIP	0. 1uF	10/0	25V	* CN101	1-580-875-11	SOCKET, CONNECTO	R (SMT	') 26P		
C103		CERAMIC CHIP	470PF	10%	50V			SOCKET, CONNECTO				
C105		TANTALUM CHIP	4. 7uF	10%	16V	011102	1 000 000 11	2001121, 0011112010	(2002	.,		
C106		CERAMIC CHIP	1uF	10%	16V			< IC >				
0100	1 101 010 11											
C107	1-164-505-11	CERAMIC CHIP	2. 2uF		16V	IC101	8-752-361-90	IC CXD2515Q				
C108	1-163-035-00	CERAMIC CHIP	0. 047uF		50V	IC102	8-759-176-09	IC BA6392FP				
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V	IC103	8-752-367-61	IC CXD2565AM-T	6			
C110	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V							
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V			< COIT >				
C112	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L101	1-414-234-11	INDUCTOR, FERRIT	re bear	)		
C113	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L102	1-414-234-11	INDUCTOR, FERRIT	TE BEAD	)		
C123	1-164-232-11	CERAMIC CHIP	0. 01uF		50V	L103		INDUCTOR, FERRIT				
C124	1-164-005-11	CERAMIC CHIP	0. 47uF		25V	L104	1-216-001-00	METAL CHIP	10	5%	1/10W	
C131	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L105	1-216-295-00	METAL CHIP	0	5%	1/10W	
C132	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L106	1-414-234-11	INDUCTOR, FERRIT	FE BEAL	)		
C133	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L107	1-216-295-00	METAL CHIP	0	5%	1/10W	
C153	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	L108	1-216-295-00	METAL CHIP	0	5%	1/10W	
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V							
C161	1-163-038-00	CERAMIC CHIP	0. 1uF		25V		* .	< RESISTOR >				
C177	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R101	1-216-077-00	METAL CHIP	15K	5%	1/10W	
C178	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R102	1-216-097-00	METAL CHIP	100K	5%	1/10W	
C179	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R103	1-216-077-00	METAL CHIP	15K	5%	1/10W	
C181	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R104	1-216-085-00	METAL CHIP	33K	5%	1/10W	
C182	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R105	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	
C183	1-135-156-21	TANTALUM CHIP	6. 8uF	10%	10V	R106	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	
C184	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V	R107	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	
C185	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V	R108	1-216-073-00	METAL CHIP	10K	5%	1/10W	
C186	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R109	1-216-121-00	METAL CHIP	1M	5%	1/10W	
C187		CERAMIC CHIP	0. 1uF		25V	R110	1-216-025-00	METAL CHIP	100	5%	1/10W	
C188	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	R112	1-216-049-00	METAL CHIP	1K	5%	1/10W	
C191	1-163-091-00	CERAMIC CHIP	8PF		50V	R122	1-216-295-00	METAL CHIP	0	5%	1/10W	
C192		CERAMIC CHIP	8PF		50V	R123	1-216-073-00		10K	5%	1/10W	
C193		CERAMIC CHIP	220PF	5%	50V	R124	1-216-097-00		100K	5%	1/10W	
C194	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	R125	1-216-049-00	METAL CHIP	1K	5%	1/10W	

# BD CD LOWER CD MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Re	mark
R126 R127	1-216-049-00 1-216-049-00	METAL CHIP	1K 1K	5% 5%	1/10W 1/10W	*	A-4365-928-A	CD MAIN BOARD, (		***************************************	
R131	1-216-037-00		330	5%	1/10W						
R158	1-216-111-00		390K		1/10W		4-875-327-31		(=)		
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W		7-682-547-09	SCREW +BVTT 3X6	(S)		
R181	1-216-053-00		1.5K		1/10W			< CAPACITOR >			
R182	1-216-080-00		20K	5%	1/10W						
R183	1-216-080-00		20K	5%	1/10W	C306	1-126-059-11		10uF	20%	50V
R184	1-216-080-00		20K	5%	1/10W	C307	1-126-163-11		4. 7uF	20%	50V
R185	1-216-080-00	METAL CHIP	20K	5%	1/10W	C308	1-124-472-11		470uF	20%	10V
D40#						C309	1-124-473-11		1000uF	20%	10V
R187	1-216-035-00		270	5%	1/10W	C311	1-126-300-11	ELECT	0. 47uF	20%	50V
R188	1-216-121-00		1M	5%	1/10W						
R189	1-414-234-11	INDUCTOR, FERRI	TE BEA	D		C312	1-124-472-11		470uF	20%	10V
		/ OULTMALL )				C314	1-126-059-11		10uF	20%	50V
		< SWITCH >				C315	1-126-163-11		4. 7uF	20%	50V
2404	4 550 005 44	OWITMON /2	*******			C317	1-126-022-11		47uF	20%	16V
S101	1-572-085-11	SWITCH, LEAF (L	(TIMIT)			C318	1-164-159-11	CERAMIC	0. 1uF		50V
		< VIBRATOR >				C320	1-161-494-00	CERAMIC	0. 022uF		25V
						C321	1-126-022-11		47uF	20%	16V
X101	1-579-904-11	VIBRATOR, CRYST	'AL (33	. 8MH	z)	C322	1-161-494-00		0. 022uF		25V
		******				C323	1-164-159-11		0. 1uF		50V
						C341	1-126-376-11		470uF	20%	25V
*	1-650-502-11	CD LOWER BOARD				0011	1 120 070 11	EDDO!	Trojur	20%	201
		*****				C362	1-164-159-11	CERAMIC	0. 1uF		50V
						C364	1-164-159-11		0. 1uF		50V
		< CONNECTOR >				C366	1-162-282-31		100PF	10%	50V
						C371	1-162-284-31		150PF	10%	50V
CN201	1-691-644-11	SOCKET, CONNECT	OR 7P			C372	1-162-284-31		150PF	10%	50V
		< RESISTOR >				C373	1-162-284-31	CERAMIC	150PF	10%	50V
						C374	1-162-284-31		150PF	10%	50V
R201	1-249-418-11	CARBON	1. 2K	5%	1/4W	C375	1-130-479-00		0. 0047uF	5%	50V
R202	1-247-836-11		1. 6K		1/4W	C376	1-130-479-00		0. 0047uF	5%	50V
R203	1-249-421-11		2. 2K		1/4W	C377	1-130-472-00		0. 0012uF	5%	50V
	1-249-423-11		3. 3K		1/4W		1 100 1/2 00	WI DING	o. corbar	0.0	001
	1-249-426-11		5. 6K		1/4W	C378	1-130-472-00	MYLAR	0. 0012uF	5%	50V
					_,	C379	1-124-443-00		100uF	20%	10V
R206	1-247-856-00	CARBON	11K	5%	1/4W	C380	1-124-443-00		100uF	20%	10V
	1-249-418-11		1.2K	5%	1/4W		1-162-291-31		560PF	10%	50V
	1-247-836-11		1.6K		1/4W		1-162-291-31		560PF	10%	50V
	1-249-421-11		2. 2K	5%	1/4W					20.0	
		< SWITCH >				•		< CONNECTOR >			
						CN301	1-750-585-11	CONNECTOR, FFC/F	PC 7P		
		SWITCH, TACTILE	•		,	* CN303	1-568-943-11	PIN, CONNECTOR 5	P		
		SWITCH, TACTILE				1		CONNECTOR, FFC/F			
		SWITCH, TACTILE			(PLAY MODE))	I		CONNECTOR, FFC/F			
		SWITCH, TACTILE				* CN309	1-568-836-11	SOCKET, CONNECTO	R 17P		
S205	1-554-303-21	SWITCH, TACTILE	(CLEAF	₹)				< DIODE >			
S206	1-554-303-21	SWITCH, TACTILE	(CHECE	()		-		V DIODE /			
		SWITCH, TACTILE	•		N)	D321	8-719-987-63	DIODE 1N4148M			
		SWITCH, TACTILE			41)	D341	8-719-010-42		R		
		SWITCH, TACTILE				12.041	2 110 010 42	PIODE OF 0.0DD	U		
		******			*****						

# CD MAIN CD UPPER

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
		< IC >	=			R347	1-249-415-11	CARBON	680	5%	1/4W
						R348	1-247-834-11	CARBON	1.3K	5%	1/4W
IC302	8-759-061-65	IC LA5602				R349	1-249-428-11		8. 2K		1/4W
	8-759-805-37		iD-MA			R350	1-247-862-11		20K	5%	1/4W
	8-759-605-00					R359	1-249-417-11		1K	5%	1/4W
	8-752-854-58						1 210 111 11			0	-,
	8-759-172-31		.o 000Q			R360	1-249-417-11	CARBON	1K	5%	1/4W
10011	0 100 172 01	10 Disoloi				R361	1-249-429-11		10K	5%	1/4W
IC371	8-759-145-58	IC uPC4558	≀r			R363	1-249-417-11		1K	5%	1/4W
	8-759-145-58					R365	1-249-417-11		1K	5%	1/4W
10372	0 733 143 30	10 1104330	10			R366	1-249-417-11		1K	5%	1/4W
		< DIODE >				nout	1 243 417 11	CARDON	11/	3/0	1/4"
		V DIONE /				R367	1-249-417-11	CADRON	1K	5%	1/4W
TWO A	0 710 200 02	DIODE 11EC	10							5%	1/4W 1/4W
	8-719-200-82					R368	1-249-417-11		1K		
	8-719-200-82					R371	1-247-852-11		7. 5K		1/4W
	8-719-987-63					R372	1-247-852-11		7. 5K		1/4W
JW428	8-719-987-63	DIODE 1N41	.48M			R373	1-247-852-11	CARBON	7. 5K	5%	1/4W
		< TRANSISTOR	<b>?</b> >			R374	1-247-852-11	CARBON	7. 5K	5%	1/4W
			•			R375	1-249-431-11		15K	5%	1/4W
Q302	8-729-900-65	TRANSISTOR	DTA144ES			R376	1-249-431-11		15K	5%	1/4W
Q303	8-729-900-89		DTC144ES			R377	1-249-431-11		15K	5%	1/4W
Q322	8-729-119-78		2SC2785-			R378	1-249-431-11		15K	5%	1/4W
Q341	8-729-900-89		DTC144ES			11370	1 742 401 11	OMIDON	1011	370	1/411
Q352	8-729-900-65		DTA144ES			R379	1-249-419-11	CADRON	1. 5K	59	1/4W
4002	0 723 300 03	THANSISTOR	DIVITATED			R380	1-249-419-11		1. 5K		1/4W
Q353	8-729-900-65	TDANCICTOD	DTA144EC			R381			1. 5K		1/4W
Ų	0-729-900-03	INANSISION	DTA144ES			1	1-249-419-11				
		< RESISTOR >	`			R382 R383	1-249-419-11 1-249-441-11		1. 5K 100K		1/4W 1/4W
		\ IILDIDIOI /				11303	1 243 441 11	OMIDON	10011	J/0	1/411
R308	1-260-064-11	CARBON	1	5%	1/2W	R384	1-249-441-11	CARBON	100K	5%	1/4W
R313	1-249-417-11	CARBON	1K	5%	1/4W	R385	1-249-421-11	CARBON	2. 2K	5%	1/4W
R321	1-249-429-11	CARBON	10K	5%	1/4W	R386	1-249-421-11	CARBON	2. 2K	5%	1/4W
R322	1-249-429-11	CARBON	10K	5%	1/4W	R389	1-247-807-31		100	5%	1/4W
R323	1-249-417-11	CARBON	iK	5%	1/4W	R390	1-247-807-31	CARBON	100	5%	1/4W
R324	1-249-428-11		8. 2K		1/4W			< VIBRATOR >			
R325	1-249-428-11	CARBON	8. 2K	5%	1/4W						
R326	1-249-428-11	CARBON	8. 2K		1/4W	X321	1-579-175-11	VIBRATOR, CERA	MIC (10	OMHz)	
R327	1-249-428-11	CARBON	8. 2K	5%	1/4W	******	******	******	******	*****	******
R328	1-249-428-11	CARBON	8. 2K	5%	1/4W						
						*	1-650-501-11	CD UPPER BOARD			
R329	1-249-428-11	CARBON	8. 2K	5%	1/4W			*****			
R333	1-249-417-11	CARBON	1K	5%	1/4W						
R334	1-249-425-11	CARBON	4. 7K	5%	1/4W			< DIODE >			
R335	1-249-429-11		10K	5%	1/4W						
R336	1-249-429-11		10K	5%	1/4W	D201	8-719-313-72	LED SEL3810A	-CD (II	1)	
				•	,	D202	8-719-313-66				
R338	1-249-425-11	CARBON	4. 7K		1/4W						
R339	1-249-425-11	CARBON	4. 7K	5%	1/4W			< RESISTOR >			
R340	1-249-425-11	CARBON	4. 7K	5%	1/4W	The state of the s					
R341	1-247-876-11	CARBON	75K	5%	1/4W	R210	1-249-423-11	CARBON	3. 3K	5%	1/4W
R342	1-247-876-11	CARBON	75K	5%	1/4W	R211	1-249-426-11	CARBON	5.6K	5%	1/4W
						R212	1-247-856-00		11K	5%	1/4W
R343	1-247-876-11	CARBON	75K	5%	1/4W	R213	1-249-418-11		1. 2K		1/4W
R344	1-247-876-11		75K	5%	1/4W	R214	1-247-836-11		1. 6K		1/4W
R345	1-249-423-11		3. 3K		1/4W			>**	2. 011	0.0	-,
R346	1-249-424-11		3. 9K		1/4W	R215	1-249-421-11	CARBON	2. 2K	5%	1/4W
	10 1 <b>0</b> 1 11		0. 011	U/U	~/ ***	1 10010	1 210 121 11	3.HD0//	~. L11	0/0	1/ 111

# CD UPPER H. P. LEAF SW (A) LEAF SW (B) LOADING MOTOR MAIN

R217   1-248-243-11 CABBON   1.0	Ref. No.	Part No.	Description		Rem	ark	Ref. No.	Part No.	Description		Ren	nark
R219	R217	1-249-426-11	CARBON	5. 6K 5%	1/4W		*	1-640-703-11			-	
CS-54   1-184-159-11   CERAMIC   0.1 uF   50V	R219	1-249-411-11	CARBON	330 5%	1/4W				< CAPACITOR >			
S210	REEU	1 243 410 11		210 JA) .	1/ 111		C545	1-164-159-11	CERAMIC	0. 1uF		50V
S211									< CONNECTOR >			
S212   1-534-933-21 SHITCH, TACTILE (4 (DISC SELECT))	S211	1-554-303-21	SWITCH, TACTILE	(2 (DISC SELE	ECT))		* CN416	1-568-943-11	PIN, CONNECTOR	5P		
S215	S213	1-554-303-21	SWITCH, TACTILE	(4 (DISC SELI	ECT))				< SWITCH >			
S218   1-554-303-21 SWITCH, TACTILE (		1-554-303-21	SWITCH, TACTILE	( KN <b>44</b> (AMS)	)		S2	1-571-736-11	SWITCH, LEAF (	PLAY)		
S219					' )					*	******	****
S220	S218	1-554-303-21	SWITCH, TACTILE	(11)					LOADING MOTOR	BOARD		
* 1-650-503-11 H.P. BOARD   1-650-503-11 H.P					SE)					****		
**************************************	******	*****	*******	******	*****	****						
C1237   1-162-282-31   CERAMIC   100PF   10%   50V	*	1-650-503-11										
C1237   1-162-282-31   CERAMIC   100PF   10%   50V			< CAPACITOR >				*	A-4365-925-A	MAIN BOARD, COM	MPLETE (E, AUS	, MIX, PX)	
C1238   1-162-282-31 CERAMIC   100Pf   10%   50V   * A-3369-094-A MAIN BOARD, COMPLETE (AEP1)	C1237	1-162-282-31	CERAMIC 1	100PF 1	0%	50V				1 1		
* A-4369-258-A MAIN BOARD, COMPLETE (Canadian)  ** A-4369-605-A MAIN BOARD, COMPLETE (Gandian)  ***********************************	C1238	1-162-282-31										
CNJ1201 1-569-113-11 JACK, LARGE TYPE (HEADPHONES)  ***********************************			< JACK >						*		ian)	
**************************************			,		,	<***			MAIN BOARD, COM	MPLETE (G)	1011)	
**************************************												
C2 1-124-477-11 ELECT 47uF 20% 25V C3 1-164-159-11 CERAMIC 0. 1uF 50V C4 1-161-379-00 CERAMIC 0. 01uF 20% 25V C544 1-164-159-11 CERAMIC 0. 1uF 50V C5 1-161-379-00 CERAMIC 0. 01uF 20% 25V C7 1-124-477-11 ELECT 47uF 20% 25V C8 1-161-379-00 CERAMIC 0. 01uF 20% 25V C8 1-161-379-00 CERAMIC 0. 01uF 20% 25V C8 1-161-379-00 CERAMIC 0. 01uF 20% 25V C9 1-161-379-00 CERAMIC 0. 01uF 20% 25V C9 1-161-379-00 CERAMIC 0. 01uF 20% 25V C9 1-161-379-00 CERAMIC 0. 01uF 20% 25V C11 1-124-907-11 ELECT 10uF 20% 50V C12 1-124-907-11 ELECT 10uF 20% 50V C12 1-124-902-00 ELECT 0. 47uF 20% 50V C13 1-124-903-11 ELECT 1uF 20% 50V C	*	1-640-702-11							< CAPACITOR >			
C544   1-164-159-11   CERAMIC   O. 1uf   D. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.			< CAPACITOR >									
C544   1-164-159-11   CERAMIC   O. 1uf   50V   C4   1-161-379-00   CERAMIC   O. 01uf   20%   25V   C5   1-161-379-00   CERAMIC   O. 01uf   20%   25V   C5   CERAMIC   O. 01uf   CERAMIC			VIII II OTTOR									
* CN415 1-568-942-11 PIN, CONNECTOR 4P  ** CN415 1-568-942-11 PIN, CONNECTOR 4P  C5 1-164-159-11 CERAMIC 0.1uF (EXCEPT E, AUS, MX, PX)  C6 1-161-379-00 CERAMIC 0.01uF 20% 25V C7 1-124-477-11 ELECT 47uF 20% 25V C8 1-571-736-11 SWITCH, LEAF (MOTOR)  S5 1-571-736-11 SWITCH, LEAF (PLAY)  ***********************************	C544	1-164-159-11	CERAMIC 0	). 1uF		50V						
CEXCEPT E, AUS, MX, PX    C6			< CONNECTOR >				C5	1-161-379-00		0. 01uF	20%	25V
C6	* CN415	1-568-942-11	PIN, CONNECTOR 4P	)			C5	1-164-159-11				50V
C7 1-124-477-11 ELECT 47uF 20% 25V S4 1-571-736-11 SWITCH, LEAF (MOTOR) S5 1-571-736-11 SWITCH, LEAF (PLAY)  ***********************************			< SWITCH >				C6	1-161-379-00			20%	25V
S4     1-571-736-11 SWITCH, LEAF (MOTOR)     C8     1-161-379-00 CERAMIC     0.01uF     20%     25V       S5     1-571-736-11 SWITCH, LEAF (PLAY)     C9     1-161-379-00 CERAMIC     0.01uF     20%     25V       ***********************************												
S5   1-571-736-11 SWITCH, LEAF (PLAY)   C9   1-161-379-00 CERAMIC   0.01uF   20%   25V	S4	1-571-736-11	SWITCH, LEAF (MOT	OR)								
C10 1-161-379-00 CERAMIC 0.01uF 20% 25V C11 1-124-907-11 ELECT 10uF 20% 50V C12 1-124-902-00 ELECT 0.47uF 20% 50V C13 1-124-903-11 ELECT 1uF 20% 50V				*								
C11 1-124-907-11 ELECT 10uF 20% 50V C12 1-124-902-00 ELECT 0. 47uF 20% 50V C13 1-124-903-11 ELECT 1uF 20% 50V	*******	******	*******	*****	*****	***	04.0	1 101 050 00	arnamia.	0.04.5	0.00:	0511
C12 1-124-902-00 ELECT 0. 47uF 20% 50V C13 1-124-903-11 ELECT 1uF 20% 50V												
C13 1-124-903-11 ELECT 1uF 20% 50V												

Ref. No.	Part No.	Description		Ren	nark	Ref. No.	Part No.	Description		Rem	nark
C15	1-124-907-11	ELECT	10uF	20%	50V	C63	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C16	1-124-907-11		10uF	20%	50V	C64	1-161-379-00		0. 01uF	20%	25V
C17	1-124-907-11		10uF	20%	50V	C65	1-124-477-11		47uF	20%	25V
										20%	25V
C18	1-124-907-11		10uF	20%	50V	C67	1-161-379-00		0. 01uF		
C19	1-136-158-00		0. 027uF	5%	50V	C71	1-136-173-00		0. 47uF	5%	50V
		(EXCEPT US, Cana	dian, G, IT)					(AEP, UK)			
C19	1-136-159-00	FILM (G, IT)	0. 033uF	5%	50V	C72	1-161-494-00	CERAMIC (AEP, UK)	0. 022uF		25V
C19	1-136-160-00	FILM (US, Canadian)	0. 039uF	5%	50V	C73	1-124-463-00	ELECT (AEP, UK)	0. 1uF	20%	50V
C20	1-136-158-00	FILM	0. 027uF	5%	50V	C1001	1-124-257-00	ELECT	2. 2uF	20%	50V
020	1 100 100 00	(EXCEPT US, Cana		0.0			1-162-282-31		100PF	10%	50V
C20	1-136-159-00		0. 033uF	5%	50V		1-162-282-31		100PF	10%	50V
		(G, IT)									
C20	1-136-160-00	FILM	0. 039uF	5%	50V	C1004	1-124-477-11	ELECT	47uF	20%	25V
		(US, Canadian)				C1005	1-161-377-00	CERAMIC	0. 0047uF	20%	16V
						C1006	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C21	1-161-046-00	CERAMIC	0.0039uF	10%	25V	C1007	1-124-464-11	ELECT	0. 22uF	20%	50V
C22	1-161-046-00		0. 0039uF	10%	25V		1-124-477-11		47uF	20%	25V
					50V	01000	1 124 477 11	(G, IT)	Trui	2070	201
C23	1-124-903-11		1uF	20%	I			(u, 11)			
C24	1-162-294-31		0.001uF	10%	50V						
C25	1-161-327-00	CERAMIC	0.0033uF	30%	16V		1-124-477-11		47uF	20%	25V
						C1025	1-162-286-31	CERAMIC	220PF	10%	50V
C26	1-124-477-11	ELECT	47uF	20%	25V			(G, IT)			
C27	1-126-962-11	ELECT	3. 3uF	20%	50V	C1026	1-162-219-31	CERAMIC	68PF	5%	50V
C28	1-161-494-00		0. 022uF		25V			(G, IT)			
C29	1-124-907-11		10uF	20%	50V	C1041	1-162-290-31		470PF	10%	50V
C30	1-161-494-00		0. 022uF	20%	25V	01011	1 102 200 01	(G, IT)	17011	10/0	001
030	1 101 434 00	OLIVANIO	0. 022ui		234	C1051	1-124-257-00		2. 2uF	20%	50V
001	1 101 005 00	CEDANIC	0000000		F07/	01031	1-124-237-00	ELECT	Z. Zur	20%	JU Y
C31	1-101-005-00		22000PF	4.00	50V	44050	4 400 000 04	ann ivi a	400DE	4.000	E011
C32	1-162-196-31		5. 6PF	10%	50V		1-162-282-31		100PF	10%	50V
		(AEP, UK)					1-162-282-31		100PF	10%	50V
C32	1-162-198-31	CERAMIC	8. 2PF	10%	50V	C1054	1-124-477-11	ELECT	47uF	20%	25V
		(EXCEPT AEP, UK)				C1055	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C33	1-161-379-00	CERAMIC	0.01uF	20%	25V	C1056	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C34	1-164-159-11	CERAMIC	0. 1uF		50V						
		(AEP, UK)				C1057	1-124-464-11	ELECT	0. 22uF	20%	50V
						C1058	1-124-477-11	ELECT	47uF	20%	25V
C37	1-161-374-11	CERAMIC	0. 0015uF	20%	50V			(G, IT)			
		(AEP, UK)				C1060	1-124-477-11		47uF	20%	25V
C38	1-102-120-00		0. 0018uF	10%	50V		1-162-286-31		220PF	10%	50V
000	1 102 120 00	(AEP, UK)	0. 001 <b>0</b> 01	10/0	001	01010	1 102 200 01	(G. IT)	22011	1070	001
C39	1-101-005-00		22000PF		50V	C1076	1-162-219-31		68PF	5%	50V
000	1 101 003 00	(AEP, UK)	22000FT		304	. 01070	1 102 213 31	(G, IT)	0011	3.0	301
CAE	1 101 270 00		0.01	0.00	0.00			(0, 11)			
C45	1-161-379-00		0. 01uF	20%	25V	94004	4 400 000 04	anning	ARODE	1.00/	F017
C51	1-102-961-00	CERAMIC	27PF	5%	50V	61091	1-162-290-31	(G, IT)	470PF	10%	507
C52	1-102-961-00	CERAMIC	27PF	5%	50V	C1221	1-126-101-11	ELECT	100uF	20%	16V
C53	1-124-477-11		47uF	20%	25V		1-126-176-11		220uF	20%	10V
C54	1-161-379-00		0, 01uF	20%	25V		1-126-176-11		220uF	20%	10V
C55	1-161-379-00		0. 01uF		25V		1-101-006-00		0. 047uF	2070	50V
				20%	1	01243	T TOT 000_00		0. 04/Ul		JUY
C56	1-161-379-00	UENAMIU	0. 01uF	20%	25V			(G, IT)			
C57	1-161-379-00	CERAMIC	0. 01uF	20%	25V	C1245	1-164-097-11	CERAMIC	0. 022uF		50V
C58	1-161-379-00		0. 01uF	20%	25V			(AEP, UK)			
C61	1-124-925-11		2. 2uF	20%	100V	C1246	1-101-006-00		0. 047uF		50V
C62	1-124-463-00		0. 1uF	20%	50V	01210	_ 101 000 00	(G, IT)	J. J I. at		•••
004	1 124 400 00	LULV1	J. Iui	400	JU 1			(U, 11/			

Ref. No.	Part No.	Description		Rer	nark	Ref. No.	Part No.	Descrip	otion	Remark
C1246	1-164-097-11	CERAMIC (AEP, UK)	0. 022uF		50V	C1380	1-164-159-11	CERAMIC	0. 1uF	50V
C1247	1-101-006-00		0. 047uF		50V			< FILTE	CR >	
C1247	1-164-097-11		0. 022uF		50V	CF1 CF2	1-567-389-11 1-567-389-11			
C1248	1-101-006-00		0. 047uF		50V	CF3 CF4		FILTER,	CERAMIC (G, IT)	
C1248	1-164-097-11	CERAMIC (AEP, UK)	0. 022uF		50V	CF5	1-577-075-11	OSCILLA	TOR, CERAMIC	
C1940	1-161-494-00	CEDAMIC	0 0994.5		957	CF6	1-760-220-11	FILTER,	CERAMIC	
01249	1-101-494-00	(G, IT)	0. 022uF		25V			< CONNE	CTOR >	
C1250	1-161-494-00		0. 022uF		25V	* CN1	1-568-830-11		CONNECTOR 11P	
C1302	1-102-394-11		0. 01uF		250V				L BOARD (SPEAKER)	
C1304	1-126-974-11	ELECT (A295)	3300uF	20%	50V	* CN1201	1-537-327-21	•	E, AUS, MX, PX) L BOARD (SPEAKER)	(E, AUS, MX, PX)
C1304	1-128-493-11		4700uF	20%	71V	CN1204	1-564-511-11	PLUG, C	ONNECTOR 8P	
		(D550)				* CN1205	1-564-509-11	PLUG, C	ONNECTOR 6P	
C1305	1-126-974-11	ELECT	3300uF	20%	50V	* CN1206	1-568-839-11	SOCKET,	CONNECTOR 23P	
		(A295)				* CN1208	1-568-836-11	SOCKET,	CONNECTOR 17P	
C1305	1-128-493-11		4700uF	20%	71V	* CN1211	1-564-507-11	PLUG, C	ONNECTOR 4P	
01000	1 104 477 11	(D550)	45.5	0.000			1-506-468-11			
	1-124-477-11		47uF	20%	25V	* CN1301	1-564-513-11	PLUG, C	ONNECTOR 10P	
	1-126-101-11		100uF	20%	16V	01/4 000	4 500 040 44	nyu go	WIRAMOD OD (DOWNED	aarin an)
	1-126-101-11		100uF	20%	16V	* CN1302	1-566-210-11	PIN, COI	NNECTOR 3P (POWER K, G)	SOURCE)
	1-124-563-11		2200uF	20%	25V					
	1-126-946-11		6800uF	20%	25V			< DIODE	>	
	1-124-122-11 1-124-907-11		100uF	20%	50V	D4	0 540 005 00	DIODE	43/44/4014	
	1-124-907-11		10uF 47uF	20%	50V 50V	D1	8-719-987-63		1N4148M	
01310	1 124 310 11	LLLO1	47ur	20%	307		8-719-815-85		1S1585 (D550)	
C1319	1-124-463-00	FLECT	0. 1uF	20%	50V		8-719-987-63 8-719-815-85		1N4148M (A295) 1S1585 (D550)	
	1-124-907-11		10uF	20%	50V		8-719-987-63		1N4148M (A295)	
	1-161-379-00		0. 01uF	20%	25V	DILOT	0 713 307 03	DIODL	INTITOM (ALSS)	
	1-161-379-00		0. 01uF	20%	25V	D1301	8-719-302-38	DIODE	RBV-602-01 (D550)	
C1324	1-124-907-11	ELECT	10uF	20%	50V		8-719-312-09		RBA-402 (A295)	
							8-719-200-82		11ES2	
C1326	1-124-907-11	ELECT	10uF	20%	50V	D1303	8-719-200-82	DIODE	11ES2	
C1330	1-126-101-11	ELECT	100uF	20%	16V	D1304	8-719-200-82	DIODE	11ES2	
	1-102-394-11		0. 01uF		250V					
C1335	1-124-907-11		10uF	20%	50V		8-719-200-82		11ES2	
		(AEP2, UK, G)					8-719-001-42		UZL-11M1	
C1336	1-126-101-11		100uF	20%	16V		8-719-200-82		11ES2	
		(AEP2, UK, G)					8-719-002-60		UZL-33L	
C1240	1194	FIFCT	9900	0.00	100	D1309	8-719-014-66	DIODE	UZP-5. 6B	
	1-124-556-11 1-124-907-11		2200uF 10uF	20%	16V 50V	D1010	0 710 007 00	DIODE	1 N 4 1 4 0 W	
	1-124-907-11		10ur 2. 2uF	20% 20%	100V		8-719-987-63		1N4148M	
	1-124-122-11		2. zur 100uF	20%	50V		8-719-200-82 8-719-200-82		11ES2	
	1-126-105-11		100ur 1000uF	20%	35V		8-719-200-82		11ES2 11ES2	
	_ 1=0 100 11		100001	20%	001		8-719-200-82		11ES2 11ES2	
C1353	1-136-165-00	FILM	0. 1uF	5%	50V	PTOIT	5 /15 Z00 0Z	PIONE	11006	
	1-136-165-00		0. 1uF	5%	50V	D1315	8-719-815-85	DIODE	1S1585 (D550)	
	1-124-122-11		100uF	20%	50V		8-719-987-63		1N4148M (A295)	
	<del>-</del>					21010	10 551 00	- 1000	(1200)	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D1316	8-719-815-85	DIODE 1S1585 (D550)		L1302	1-408-117-00	INDUCTOR	10uH (G)
D1316	8-719-987-63 8-719-200-82	DIODE 1N4148M (A295)				< FILTER >	
	8-719-200-82	DIODE 11ES2					200
D1385	8-719-200-82	DIODE 11ES2			1-239-597-11 1-239-597-11		
		< FRONT END >				/ TDANCICTO	D \
FE1	1-465-007-11	FRONT END (4 GANG) (G, IT)				< TRANSISTO	π /
FE1		FRONT END (2 BAND) (US, Canadi	an, UK)	Q1	8-729-230-99	TRANSISTOR	2SC2669-0Y
FE1		FRONT END (FM) (2 GANG)		Q2	8-729-201-53	TRANSISTOR	2SA1015-GR (G, IT)
		(AEP, E, AUS, MX, PX)		Q3	8-729-119-76		2SA1175-HFE (AEP, UK)
FE2	1-239-260-11	ENCAPSULATED COMPONENT		Q4	8-729-119-76		2SA1175-HFE (AEP, UK)
		(E, G, IT, AUS, MX, PX)		Q5	8-729-900-80	TRANSISTOR	DTC114ES (AEP, UK)
FE2	1-239-261-12	ENCAPSULATED COMPONENT (AEP, U	JK)	00	0 700 000 00	TRANGIGTOR	DTG114EG (AED HV)
850		DUGADQUI AMIDD GOMDONICHM AN DE	,	Q6	8-729-900-80		DTC114ES (AEP, UK) DTC114ES (AEP, UK)
FE2	1-239-634-11	ENCAPSULATED COMPONENT, AM. RE	'	Q7 08	8-729-900-80 8-729-900-80		DTC114ES (AEP, UK)
EEO	1 000 400 11	(US, Canadian) ENCAPSULATED COMPONENT (AEP, U	IK)	Q6 Q55	8-729-900-61		DTA114ES (ALI, ON)
FE3	1-230-403-11	ENCAPSULATED COMPONENT (ALP, C	JK)	Q55 Q61	8-729-202-67		2SK246-GR3
		< IC >		401	0 720 202 01	THEREDICAL	
		(10)		Q62	8-729-201-84	TRANSISTOR	2SC3112-B
IC1	8-759-176-03	IC LA1835		Q71	8-729-202-67	TRANSISTOR	2SK246-GR3 (AEP, UK)
IC51	8-759-175-87			Q72	8-729-201-84		2SC3112-B (AEP, UK)
IC1001	8-759-634-51	IC M5218AP		Q1001	8-729-119-78	TRANSISTOR	2SC2785-HFE
IC1002	8-759-000-48	IC MC14052BCP		Q1006	8-729-900-36	TRANSISTOR	DTC124ES
IC1003	8-759-634-51	IC M5218AP				mp i va raman	DW-404EG
		7.0 Wat 10.00 ap		·	8-729-900-63		DTA124ES
	8-759-000-49			•	8-729-900-36		DTC124ES 2SC2785-HFE (A295)
	2 8-759-111-68			-	8-729-119-78 8-729-900-63		DTA124ES
	3 8-759-605-00 1 8-759-604-95			•	8-729-141-83		2SB1094-LK
	5 8-759-820-13			Ø1301	0 723 141 03	Hemorpron	2001031 BK
101000	, 0 703 020 10	TO Bromeo		01302	8-729-209-15	TRANSISTOR	2SD2012
IC1306	8-759-231-58	IC TA7812S (AEP2, UK, G)		Q1381	8-729-900-80	TRANSISTOR	DTC114ES
			-	Q1382	8-729-900-61	TRANSISTOR	DTA114ES
		< IFT >		Q1383	8-729-900-80	TRANSISTOR	DTC114ES
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILT	ER)			< RESISTOR	<b>&gt;</b>
		< JACK >		R1	1-249-411-11	CARBON	330 5% 1/4W
				R2	1-249-411-11		330 5% 1/4W
* J1001	1-580-912-11	JACK, PIN 4P (PHONO/VIDEO)		R3	1-249-409-11		220 5% 1/4W
*****		(EXCEPT E, AUS, MX, PX)	E (110 MI DV)	<u> </u>	1-249-402-11		56 5% 1/4W F
		L JACK, PIN 4P (PHONO/VIDEO) ( L JACK, PIN 2P (SURROUND SPEAK		R5	1-247-891-00		330K 5% 1/4W
		(EXCEPT US, Canadian)		R6	1-249-411-11		330 5% 1/4W
		/ <b>0011</b> \		R7	1-247-891-00		330K 5% 1/4W (G, IT)
		< COIL >		R8	1-249-411-11		330 5% 1/4W (G, IT) 100 5% 1/4W F
T 1	1-407-500-00	INDUCTOR 4.7mH (AEP, U	K/	<u>/</u> kR9 R10	1-249-405-11 1-249-437-11		47K 5% 1/4W
L1 L1	1-410-688-31	· ·	N)	N10	1 245 457 11	. CARDON	4711 370 1741
ы	1 410 000 0	(EXCEPT AEP, UK)		R12	1-249-429-11	CARBON	10K 5% 1/4W
L2	1-410-525-11		K)	R13	1-249-442-11		510 5% 1/4W
		COIL, AIR CORE		<u></u> <b>1</b> R14	1-249-403-11	CARBON	68 5% 1/4W F
L1251	1-420-872-00	COIL, AIR CORE		R16	1-249-429-11		10K 5% 1/4W
* / 00 *	4 400: 41= =:	A THRUGGOR		R17	1-247-842-11	CARBON	3K 5% 1/4W
L1301	1-408-117-00	O INDUCTOR 10uH (G)					
				The or	omponents ider	tified by	Les composants identifiés
				1	Λor dotted 1		par une marque A sont
					⚠ are critic		critiques pour la sécurité.
					y. Replace on		Ne les remplacer que par une pièce
				part i	number specif	ied.	portant le numéro spécifié.
				L			

Ref. No.	Part No.	Description			Re	emark ——	Ref. No.	Part No.	Description			R	emark
R18	1-249-429-11	CARBON	10K	5%	1/4W		R72	1-249-433-11	CARBON	22K	5%	1/4W	
R19	1-249-441-11	CARBON	100K	5%	1/4W				(AEP, UK)				
R20	1-249-435-11	CARBON	33K	5%	1/4W		R73	1-249-414-11	CARBON	560	5%	1/4W	
R21	1-249-441-11		100K		1/4W				(AEP, UK)		•	•	
R22	1-249-437-11		47K	5%	1/4W		R74	1-249-417-11		1K	5%	1/4W	
	1 210 101 11	OTHEROTI.	1711	0.0	1/ 1//			1 210 117 11	(AEP, UK)	211	0.0	1/ 1//	
R23	1-249-399-11	CARBON	33	5%	1/4W		R75	1-249-410-11		270	5%	1/4W	
R24	1-249-425-11		4. 7K		1/4W			1 210 110 11	(AEP, UK)	2.0	0.0	2, 2	
	1 210 120 11	(AEP, UK)	2		1/ 1/1		R76	1-249-421-11		2. 2K	5%	1/4W	
R25	1-249-429-11		10K	5%	1/4W			1 210 121 11	(AEP, UK)	<b>2.</b> 211	070	1/ 111	
	1 210 120 11	(AEP, UK)	1011	070	1/ 1//				(ILII , OIL)				
R26	1-249-429-11		10K	5%	1/4W		R77	1-249-425-11	CARRON	4. 7K	5%	1/4W	
ILL O	1 210 120 11	(AEP, UK)	ION	0.4)	1/ 111		11.77	1 243 423 11	(AEP, UK)	T. / II	070	1/ 10	
R27	1-249-429-11		10K	5%	1/4W		R78	1-247-807-31		100	5%	1/4W	
1127	1 243 423 11	(AEP, UK)	1011	J/0	1/411		1176	1 247 007 31	(AEP, UK)	100	370	1/411	
		(ALF, UN)					D1001	1 940 417 11		1 V	Εø	1 //19	
R30	1-249-429-11	CADDON	101/	ΕO	1/4W			1-249-417-11 1-249-437-11		1K	5%	1/4W	
นอบ	1 7#3-479-11		10K	5%	1/4₩			1-249-437-11		47K	5% 5%	1/4W	
D91	1_9/0 /00 11	(AEP, UK)	1077	Euv	1 //00		K1003	1-749-410-11	UARDUN	820	5%	1/4W	
R31	1-249-429-11		10K	5%	1/4W		B4004	4 045 005 44	a i bbon	FOOM	Ea.	4 /400	
DOO	1 040 400 44	(AEP, UK)	0.017	F0/	4 (4111			1-247-897-11		560K		1/4W	
R32	1-249-433-11		22K	5%	1/4W			1-249-437-11		47K	5%	1/4W	
DOO	4 045 000 00	(AEP, UK)					ĺ	1-249-409-11		220	5%	1/4W	
R33	1-247-903-00		1M	5%	1/4W			1-249-441-11		100K		1/4W	
D0.4	4 040 405 44	(AEP, UK)		=0.			R1008	1-249-409-11	CARBON	220	5%	1/4W	(G, I
R34	1-249-437-11		47K	5%	1/4W								
		(AEP, UK)						1-249-417-11		1K	5%	1/4W	
								1-249-437-11		47K	5%	1/4W	
R35	1-249-423-11		3. 3K		1/4W			1-249-437-11		47K	5%	1/4W	
R36	1-249-423-11		3. 3K		1/4W			1-249-434-11		27K	5%	1/4₩	
R45	1-249-426-11		5. 6K		1/4W		R1023	1-249-434-11	CARBON	27K	5%	1/4W	
R46	1-249-426-11		5. 6K		1/4W								
R48	1-249-423-11	CARBON	3. 3K	5%	1/4W		R1024	1-249-417-11	CARBON	1K	5%	1/4W	(G, I)
							R1031	1-249-433-11	CARBON	22K	5%	1/4W	
R49	1-249-429-11	CARBON	10K	5%	1/4W		R1032	1-249-417-11	CARBON	1K	5%	1/4W	
∑R50	1-249-401-11	CARBON	47	5%	1/4W	F	R1033	1-249-433-11	CARBON	22K	5%	1/4W	
R51	1-249-417-11	CARBON	1K	5%	1/4W		R1034	1-249-425-11	CARBON	4.7K	5%	1/4W	
R52	1-249-417-11	CARBON	1K	5%	1/4W								
R53	1-249-417-11	CARBON	1K	5%	1/4W		R1035	1-249-433-11	CARBON	22K	5%	1/4W	
							R1037	1-249-437-11	CARBON	47K	5%	1/4W	
R54	1-249-417-11	CARBON	1K	5%	1/4W		R1041	1-249-417-11	CARBON	1K	5%	1/4W	
R56	1-249-425-11	CARBON	4. 7K	5%	1/4W		R1042	1-249-441-11	CARBON	100K	5%	1/4W	
R57	1-249-417-11	CARBON	1K	5%	1/4W			1-249-417-11		1K	5%	1/4W	
R58	1-249-417-11	CARBON	1K	5%	1/4W								
∠ <b>R6</b> 0	1-249-405-11	CARBON	100	5%	1/4W	F	R1052	1-249-437-11	CARBON	47K	5%	1/4W	
								1-249-416-11		820	5%	1/4W	
R61	1-249-423-11	CARBON	3. 3K	5%	1/4W	ļ		1-247-897-11		560K	5%	1/4W	
R62	1-249-425-11		4.7K		1/4W			1-249-437-11		47K	5%	1/4W	
R63	1-249-414-11		560	5%	1/4W			1-249-409-11		220	5%	1/4W	
R64	1-249-417-11		1K	5%	1/4W				-			-, •.,	
R65	1-249-410-11		270	5%	1/4W		R1057	1-249-441-11	CARBON	100K	5%	1/4W	
								1-249-409-11		220	5%		(G, IT
R66	1-249-421-11	CARBON	2. 2K	5%	1/4W			1-249-417-11		1K	5%	1/4W	(~, x)
R67	1-249-425-11		4. 7K		1/4W			1-249-434-11		27K	5%	1/4W	
R68	1-249-425-11		4. 7K		1/4W			1-249-434-11		27K	5%	1/4W	
R69	1-247-807-31		100	5%	1/4W		KIUIJ	11 POP 014 11	(EXCEPT E, AUS,		J/I)	1/411	
R71	1-249-423-11		3. 3K		1/4W	ì			(LAULI L, AUG,	man, FA)			
11/1	1 210 720 11	(AEP, UK)	o. on	J/J	1/ 411		R107/	1-249-417-11	CARRON	1K	5%	1/4W	(C 17
		(ini.) (ii)						1-249-417-11		4. 7K	5% 5%	1/4W	(u, 11
						ı	n1004	1 443 443-11	VARDUN	4. / 1	J/n	1/4₩	

mark. A are critical for safety. Replace only with

part number specified.

critiques pour la sécurité. Ne les remplacer que par une pièce

portant le numéro spécifié.

Ref. No.	Part No.	Description			Ren	ark
R1085	1-249-433-11	CARRON	22K	5%	1/4W	
R1087	1-249-437-11		47K	5%	1/4W	
R1091	1-249-417-11		1K	5%	1/4W	
R1091			100K	5%	1/4W	
	1-249-441-11					
R1220	1-249-393-11		10	5%	1/4W	
		(A295)				
R1220	1-249-397-11	CARBON	22	5%	1/4W	
		(D550)				
R1221	1-249-397-11	CARBON	22	5%	1/4W	
		(D550)				
R1222	1-249-415-11	CARBON	680	5%	1/4W	
		(A295)				
R1222	1-249-419-11		1. 5K	5%	1/4W	
TEL DE L	1 210 110 11	(D550)	1. 0	0.0	-,	
R1223	1-249-415-11		680	5%	1/4W	
N1223	1-249-419-11		000	J/6	1/411	
		(A295)				
		a		=~	4 /400	
R1223	1-249-419-11		1. 5K	5%	1/4W	
		(D550)				
<u> 1</u> R1226	1-216-454-11	METAL OXIDE	390	5%	2W	F
		(A295)				
/R1226	1-216-481-11	METAL OXIDE	1. 2K	5%	3₩	F
		(D550)				
R1233	1-247-854-11	. ,	9. 1K	5%	1/4W	
111200	1 21, 001 11	(D550)		0		
R1233	1-249-425-11	, ,	4. 7K	5%	1/4W	
птал	1 243 423 11	(A295)	4. 711	3/1)	1/ 111	
		(AZ93)				
D4 00 4	1 047 054 11	CADDON	0.117	E0/	1 /450	
R1234	1-247-854-11		9. 1K	5%	1/4W	
		(D550)				
R1234	1-249-425-11		4.7K	5%	1/4W	
		(A295)				
R1235	1-249-435-11	CARBON	33K	5%	1/4W	
		(A295)				
R1235	1-249-437-11	CARBON	47K	5%	1/4W	
		(D550)				
R1236	1-249-441-11	CARBON	100K	5%	1/4W	
R1237	1-249-429-11	CARRON	10K	5%	1/4W	
R1240	1-249-438-11		56K	5%	1/4W	
R1240	1-249-389-11		4. 7			
U1741	1 749909.11		4. /	5%	1/4W	
D1040	1 040 000 11	(AEP, UK, G, IT)	4 7	Εθν	1 /450	
R1242	1-249-389-11		4. 7	5%	1/4W	
D4050		(AEP, UK, G, IT)	4.0	<b>-</b> 0.	4 /400	
R1270	1-249-393-11		10	5%	1/4W	
		(A295)				
R1270	1-249-397-11	CARBON	22	5%	1/4W	
		(D550)				
R1271	1-249-397-11	CARBON	22	5%	1/4W	
		(D550)				
R1272	1-249-415-11	CARBON	680	5%	1/4W	
		(A295)			,	
R1272	1-249-419-11		1. 5K	5%	1/4W	
111717	1 210 110 11	(D550)	1. 01/	J/I)	1/ 111	
D1070	1-249-415-11		680	Εeν	1 //0	
R1273	1-749-410-11		UOU	5%	1/4W	
		(A295)				

1.01. HU.	Part No.	Description			Remark
R1273	1-249-419-11	CARBON (D550)	1. 5K	5%	1/4W
R1290	1-249-437-11		47K	5%	1/4W
R1301	1-249-429-11		10K	5%	1/4W
R1301	1-249-430-11	, ,	12K	5%	1/4W
R1302	1-249-429-11	<b>( /</b>	10K	5%	1/4W
R1302	1-249-430-11	CARBON (D550)	12K	5%	1/4W
R1303	1-249-421-11	CARBON	2. 2K	5%	1/ <b>4</b> W
R1304	1-249-425-11		4.7K		1/4W
	1-249-417-11		1K	5%	1/4W
	1-249-429-11		10K	5%	1/4W
R13//5	1-249-421-11	CARRON	2. 2K	5%	1/4W
	1-249-417-11		1K	5%	1/4W
RV2	1-238-600-11	<pre>&lt; VARIABLE RES. RES, ADJ, CARBO RES, ADJ, CARBO </pre> <pre>&lt; RELAY &gt;</pre>	ON 22K ON 10K		
	1-515-920-11		Z95)		
		< TERMINAL >			
* TM1		TERMINAL BOARD (EXCEPT AEP, G,	IT)		
* TM1	1-537-288-11	TERMINAL BOARD (AEP, G, IT)	, ANTEN	NA (PA	AL) (ANTENN
		< VIBRATOR >			
		VIBRATOR, CRYS (EXCEPT E, AUS,			
XT51		VIBRATOR, CRYS			

The components identified by Les composants identifiés mark 🛆 or dotted line with mark. 🛕 are critical for safety. Replace only with part number specified.

par une marque 🛕 sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# MAIN TC

Ref. No.	Part No.	Description		Ren	nark	Ref. No.	Part No.	Description		Re	mark
* .		MAIN TC BOARD, MAIN TC BOARD,		(E, AUS, MX,	PX)	C824	1-137-399-11	FILM (EXCEPT E, AUS, )	0. 1uF	5%	50V
*		(US, Canadian, Al MAIN TC BOARD,	EP, UK)	(C IT)		C824	1-164-095-11		0. 01uF	10%	16V
*	A-43/1-000-A	MAIN 10 DUAND,		(u, 11)		C825	1-124-907-11		10uF	20%	50V
		**********				C826	1-124-903-11		1uF	20%	50V
*	4-942-204-01	PLATE, GROUND				C827	1-124-902-00		0. 47uF	20%	50V
		< CAPACITOR >				C828	1-124-927-11	ELECT	4. 7uF	20%	100V
						C829	1-162-291-31	CERAMIC	560PF	10%	50V
C700	1-162-282-31	CERAMIC	100PF	10%	50V	C830	1-161-374-11	CERAMIC	0. 0015uF	20%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V	C831	1-164-056-11	CERAMIC	27PF	5%	50V
C702	1-137-372-11	FILM	0. 022uF	5%	50V	C832	1-101-890-00	CERAMIC	75PF	5%	50V
C703	1-124-907-11	ELECT	10uF	20%	50V						
C704	1-162-292-31		680PF	10%	50V	C833	1-162-288-31	CERAMIC	330PF	10%	50V
			*****	20.0		C834	1-164-066-11		68PF:	5%	50V
C710	1-162-282-31	CERAMIC	100PF	10%	50V	C903	1-124-443-00		100uF	20%	10V
C711	1-162-289-31		390PF	10%	50V	C904	1-124-443-00		100uF	20%	10V
C711	1-137-372-11		0. 022uF	5%	50V	C905	1-124-443-00		100uF	20%	10V
C712	1-124-907-11		10uF	20%	50V	0303	1 124 443 00	ELECT	10001	2010	101
C715	1-124-907-11					cone	1 104 442 00	ELECT	100	200	10V
6/13	1-124-443-00	ELECT	100uF	20%	10V	C906	1-124-443-00		100uF	20%	
0704	4 405 000 44	DILM	0.0045.1		FOU	C907	1-124-443-00		100uF	20%	10V
C721	1-137-368-11		0. 0047uI		50V	C908	1-124-443-00		100uF	20%	10V
C722	1-124-903-11		1uF	20%	50V	C909	1-124-907-11		10uF	20%	50V
C723	1-124-927-11		4. 7uF	20%	100V	C910	1-124-907-11	ELECT	10uF	20%	50V
C724	1-137-399-11		0. 1uF	5%	50V						
		(EXCEPT E, AUS, N	MX, PX)			C913	1-124-927-11	ELECT	4. 7uF	20%	100V
C724	1-164-095-11	CERAMIC	0.01uF	10%	16V	C915	1-126-933-11	ELECT	100uF	20%	16V
		(E, AUS, MX, PX)				C920	1-161-379-00	CERAMIC	0. 01uF	20%	25V
						C921	1-124-925-11	ELECT	2. 2uF	20%	100V
C725	1-124-907-11	ELECT	10uF	20%	50V	C922	1-137-460-91	FILM	0. 0082uF	5%	100V
C726	1-124-903-11	ELECT	1uF	20%	50V						
C727	1-124-902-00	ELECT	0. 47uF	20%	50V	C923	1-124-902-00	ELECT	0. 47uF	20%	50V
C728	1-124-927-11		4. 7uF	20%	100V	C924	1-137-438-11		0. 0082uF	5%	50V
C729	1-162-291-31		560PF	10%	50V	C925	1-161-329-00		0. 0068uF	30%	16V
0120	1 102 201 01	OLIU MITO	00011	10/0	001	C926	1-137-436-11		0. 0039uF	5%	50V
C730	1-161-374-11	CERAMIC	0. 0015uF	20%	50V	C927	1-137-436-11		0. 0039uF	5%	50V
C731	1-164-056-11		27PF	5%	50V	0327	1 137 430 11	LIDM	0.003341	J/8	301
C732	1-101-890-00		75PF	5%	50V	C928	1-137-399-11	EIIM	0. 1uF	E9/	50V
										5%	
C733	1-162-288-31		330PF	10%	50V	C929	1-124-120-11		220uF	20%	25V
C734	1-164-066-11	CERAMIC	68PF	5%	50V	C931	1-124-120-11		220uF	20%	25V
0000	4 400 000 01	appaula	40000	4.00	5011	C942	1-124-927-11		4. 7uF	20%	100V
C800	1-162-282-31		100PF	10%	50V			(EXCEPT E, AUS, N			
C801	1-162-290-31		470PF	10%	50V	C943	1-124-903-11	ELECT	1uF	20%	50V
C802	1-137-372-11	FILM	0. 022uF	5%	50V						
C803	1-124-907-11	ELECT	10uF	20%	50V	C944	1-124-907-11		10uF	20%	50V
C804	1-162-292-31	CERAMIC	680PF	10%	50V	C945	1-161-379-00	CERAMIC	0. 01uF	20%	25V
						C946	1-124-925-11	ELECT	2. 2uF	20%	100V
C810	1-162-282-31	CERAMIC	100PF	10%	50V						
C811	1-162-289-31	CERAMIC	390PF	10%	50V			< CONNECTOR >			
C812	1-137-372-11		0. 022uF	5%	50V						
C813	1-124-907-11		10uF	20%	50V	* CN901	1-564-507-11	PLUG, CONNECTOR	3 4P		
C815	1-124-443-00		100uF	20%	10V			PLUG, CONNECTOR			
0010	1 121 110 00	DDDO1	10001	±U/I)	101			PLUG, CONNECTOR			
C821	1-137-368-11	FIIM	0. 0047uF	5%	50V			PLUG, CONNECTOR			
C822	1-137-308-11			อน 20%	50V 50V						
			1uF		1	บหลดอ	1-204-303-11	PLUG, CONNECTOR	1 4r		
C823	1-124-927-11	CLEVI	4. 7uF	20%	100V	anos	1 504 500 1:	DIN GONDONS	(OMALI	40	
						* CN906	1-564-706-11	PIN, CONNECTOR	(SMALL TYPE)	4P	

## MAIN TC

Ref. No.	Part No.	Description Remark	Ref. No.	Part No.	Description		Remark
* CN911	1-560-061-00	PIN, CONNECTOR 3P	R711	1-247-889-00	CARBON 270	)K 5%	1/4W
* CN912	1-560-060-00	PIN, CONNECTOR 2P	R712	1-249-404-00	CARBON 82	5%	1/4W
			R713	1-247-882-11	CARBON 130	)K 5%	1/4W
		< DIODE >	R714	1-247-850-11	CARBON 6. 2	2K 5%	1/4W
			R715	1-249-433-11	CARBON 22H	5%	1/4W
D901	8-719-987-63	DIODE 1N4148M					
D902	8-719-987-63	DIODE 1N4148M	R720	1-249-425-11		7K 5%	
D903	8-719-987-63	DIODE 1N4148M	R721	1-249-429-11			
D904	8-719-987-63	DIODE 1N4148M	R722	1-249-431-11			
D905	8-719-987-63	DIODE 1N4148M	R723	1-249-429-11			
			R724	1-249-421-11	CARBON 2. 2	2K 5%	1/4W
D906	8-719-987-63		2505		albron o	N/ F0/	4 /400
D907	8-719-987-63		R725	1-249-428-11		2K 5%	
D908	8-719-987-63		R726	1-247-840-00		1K 5%	•
D909	8-719-987-63	DIODE 1N4148M	R727	1-249-433-11			
		( 70 )	R728	1-249-417-11			
		< IC >	R731	1-249-430-11	CARBON 12I	K 5%	1/4W
IC903	8-759-098-73	IC HA12172NT (EXCEPT E, AUS, MX, PX)	R801	1-247-889-00	CARBON 270	OK 5%	1/4W
IC903	8-759-198-48		R802	1-249-404-00	CARBON 82	5%	1/4W
IC904	8-759-111-44	IC uPC4570C-1	R803	1-247-882-11	CARBON 130	)K 5%	1/4W
IC905	8-759-111-44	IC uPC4570C-1	R804	1-247-850-11	CARBON 6. 2	2K 5%	1/4W
IC906	8-759-143-54	IC uPC1330HA	R811	1-247-889-00	CARBON 270	)K 5%	1/4W
IC907	8-759-240-81	IC TC4081BP	R812	1-249-404-00			
			R813	1-247-882-11		)K 5%	
		< COIL >	R814	1-247-850-11		2K 5%	
			R815	1-249-433-11			
L701	1-410-780-11		R820	1-249-425-11	CARBON 4.	7K 5%	1/4W
L801	1-410-780-11		Doo4	1 040 400 11	CARRON 101	,	4 /400
L901	1-414-223-11	INDUCTOR 470uH	R821	1-249-429-11			
		/ MDANGIGMOD	R822	1-249-431-11			
		< TRANSISTOR >	R823	1-249-429-11			
0701	0 700 110 70	TRANSISTOR OCCUTOR HER	R824	1-249-421-11		2K 5% 2K 5%	•
Q701 Q801	8-729-119-78 8-729-119-78		R825	1-249-428-11	GANDUN O.	2N 3%	. 1/4W
Q901	8-729-194-57		R826	1-247-840-00	CARRON 2	4K 5%	5 1/4W
Q902	8-729-194-57		R827	1-249-433-11			
Q903	8-729-119-76		R828	1-249-417-11			
6302	0 723 113 70	THANSISTOR ZSATITS HEL	R831	1-249-430-11			
Q904	8-729-119-78	TRANSISTOR 2SC2785-HFE	R902	1-249-389-11			
Q905	8-729-119-76		11302	1 243 000 11	Offit Doll	, 0,0	1, 1,1
Q906	8-729-900-89		R903	1-249-413-11	CARBON 47	0 5%	6 1/4W
Q907	8-729-900-89		R904	1-249-413-11			
Q908	8-729-900-89		R905	1-249-413-11			
		(EXCEPT E, AUS, MX, PX)	R906	1-249-413-11			•
		(21021 1 2, 1102, 111, 111,	R910	1-249-437-11			
Q909	8-729-900-89	TRANSISTOR DTC144ES			(E, AUS, MX, PX)		
Q910	8-729-900-65	TRANSISTOR DTA144ES					
Q911	8-729-900-65	TRANSISTOR DTA144ES	R911	1-215-451-00	METAL 18	K 1%	6 1/6W
Q912	8-729-900-89	TRANSISTOR DTC144ES			(EXCEPT E, AUS, MX, P	X)	
			R911	1-249-432-11		K 5%	6 1/4W
		< RESISTOR >			(E, AUS, MX, PX)		
			R912	1-249-440-11			
R701	1-247-889-00	•	R913	1-247-862-11			
R702	1-249-404-00	•	R914	1-249-437-11	CARBON 47	K 5%	6 1/4W
R703	1-247-882-11						
R704	1-247-850-11	CARBON 6. 2K 5% 1/4W	R915	1-249-437-11	CARBON 47	K 5%	K 1/4W

## MAIN TC OPEN/UP SW

PANEL

Ref. No.	Part No.	Description	Remark
R916	1-249-437-11	CARBON 47K 5%	1/4W
R917	1-247-864-11	CARBON 24K 5%	1/4W
R918	1-249-437-11	CARBON 47K 5%	1/4W
		(EXCEPT E, AUS, MX, PX)	
R919	1-249-433-11	CARBON 22K 5%	1/4W
R920	1-249-429-11	CARBON 10K 5%	1/4W
R921	1-249-424-11	CARBON 3. 9K 5%	1/4W
R922	1-249-389-11	CARBON 4.7 5%	1/4W
R923	1-249-434-11	CARBON 27K 5%	1/4W
R924	1-249-434-11	CARBON 27K 5%	1/4W
R925	1-249-429-11	CARBON 10K 5%	1/4W
R926	1-249-389-11		1/4W
<u></u> 1. R931	1-215-905-11		3₩ F
R932	1-249-426-11		1/4W
R933	1-249-442-11		1/4W
R934	1-249-441-11	CARBON 100K 5%	1/4W
2005		ALDROY TO	4 /407
R935	1-249-441-11		1/4W
R936	1-249-429-11	·	1/4W
R941	1-249-436-11		1/4W
R942	1-249-433-11		1/4W
D0.40	1 040 400 11	(EXCEPT E, AUS, MX, PX)	4 / 4551
R943	1-249-436-11	CARBON 39K 5%	1/4W
R944	1-249-425-11	CARBON 4. 7K 5%	1/4W
R945	1-249-433-11		1/4W
R946	1-249-421-11		1/4W
R947	1-249-421-11		1/4W
R948	1-249-433-11	·	1/4W
110 10	1 210 100 11	OTHERON ELIN ON	1/ 111
R949	1-249-438-11	CARBON 56K 5%	1/4W
R950	1-249-437-11		1/4W
R951	1-249-437-11	CARBON 47K 5%	1/4W
R952	1-249-441-11	CARBON 100K 5%	1/4W
R953	1-249-425-11	CARBON 4. 7K 5%	1/4W
R954	1-249-429-11		1/4W
R955	1-249-441-11	CARBON 100K 5%	1/4W
R956	1-249-441-11	CARBON 100K 5%	1/4W
R957	1-249-429-11	CARBON 10K 5%	1/4W
		/ ULDILDLE DEGLGTOD >	
		< VARIABLE RESISTOR >	
RV701	1-230-496-11	RES, ADJ, CARBON 10K	
RV702	1-230-496-11	RES, ADJ, CARBON 10K	
RV703	1-230-496-11	RES, ADJ, CARBON 10K	
RV704	1-230-499-11		
RV801	1 - 230 - 496 - 11	RES, ADJ, CARBON 10K	
RV802	1-230-496-11		
RV803	1-230-496-11		
RV804	1-230-499-11		
RV901	1-230-495-11		
RV902	1-230-495-11	RES, ADJ, CARBON 2.2K	

Ref. No.	Part No.	Description		Rei	nark
		< TRANSFORMER	>		
T901		TRANSFORMER, B			
******	******	******	******	******	****
*	1-638-731-11	OPEN/UP SW BOA			
		< CONNECTOR >			
* CN705	1-566-214-11	PIN, CONNECTOR	(PC BOARD)	2P	
		< SWITCH >			
		SWITCH, ROTARY		*****	****
*		PANEL BOARD, C			.7\
*		PANEL BOARD, C	OMPLETE (E, A) OMPLETE (D55)	, ,	<b>(</b> )
*			OMPLETE (D35) OMPLETE (IT)	J)	
*		,	OMPLETE (Cana	adian)	
*	A-4369-603-A	PANEL BOARD, C	• /		
*	4-949-935-01	CUSHION (FL)			
*		CUSHION (FL)			
*	4-955-792-01	HOLDER (5M), F	L TUBE		
*	4-962-699-01	HOLDER, FL TUB	Е		
		< CAPACITOR >			
C601	1-164-159-11	CERAMIC	0. 1uF		50V
C602	1-124-261-00	ELECT	10uF	20%	50V
C603	1-104-905-11	DOUBLE LAYERS	0. 22F		5. 5V
C604	1-164-159-11		0. 1uF		50V
.C605	1-136-169-00	FILM	0. 22uF	5%	50V
C607	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C608	1-161-379-00	CERAMIC	0.01uF	20%	25V
C609	1-124-910-11		47uF	20%	50V
C610	1-161-379-00		0. 01uF	20%	25V
C661	1-126-301-11	ELECT	1uF	20%	50V
C662	1-126-301-11	ELECT	1uF	20%	50V
C1102	1-124-589-11	ELECT	47uF	20%	16V
C1103	1-162-282-31	CERAMIC	100PF	10%	50V
C1104	1-124-257-00	ELECT	2. 2uF	20%	50V
C1105	1-124-464-11	ELECT	0. 22uF	20%	50V
C1106	1-137-374-11		0. 047uF	5%	50V
C1107	1-124-464-11		0. 22uF	20%	50V
C1108	1-137-442-11		0. 039uF	5%	50V
C1109 C1110	1-137-441-11 1-137-457-11		0. 027uF 0. 0027uF	5% 5%	50V 50V
C1111	1_161_997_60	CEDAMIC	0 0022-5	3 U w	100
C1111 C1112	1-161-327-00 1-162-293-31		0. 0033uF 820PF	20% 10%	16V 50V
The co	mponents iden	tified by Les	composants ic	lentifie	és

mark extstyle extstylemark.  $\Delta$  are critical for safety. Replace only with part number specified.

par une marque  $\underline{\Lambda}$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## PANEL

Ref. No.	Part No.	Description		Rem	ark	Ref. No.	Part No.	Descript	ion		Remark
C1113	1-161-379-00	CERAMIC	0. 01uF	20%	25V	D621	8-719-987-63	DIODE	1N4148M (G)		
	1-124-589-11		47uF	20%	16V	D622	8-719-987-63		1N4148M (US, C	anadian, IT	)
	1-124-257-00		2. 2uF	20%	50V	D623	8-719-987-63		1N4148M (E, IT		
	1-161-379-00		0. 01uF	20%	25V	D625	8-719-987-63		1N4148M		
	1-161-379-00		0. 01uF	20%	25V		8-719-038-63		SEL5220S-TH8C	(VIDEO)	
24400	4 400 000 04	anning	10000	400	5017	D4404	0.540.000.00	LED	ORI EGGG MIGG	(m. p.c.)	
	1-162-282-31		100PF	10%	50V		8-719-038-63		SEL5220S-TH8C		
	1-126-176-11		220uF	20%	10V		8-719-038-63		SEL5220S-TH8C		
	1-124-589-11		47uF	20%	16V		8-719-038-63		SEL5220S-TH8C		
	1-162-282-31		100PF	10%	50V		8-719-038-63		SEL5220S-TH8C		
C1154	1-124-257-00	ELECT	2. 2uF	20%	50V	D1145	8-719-038-63	LED	SEL5220S-TH8C	(VOLUME)	
C1155	1-124-464-11	ELECT	0. 22uF	20%	50V	D1150	8-719-987-63	DIODE	1N4148M		
C1156	1-137-374-11	FILM	0. 047uF	5%	50V	D1151	8-719-987-63	DIODE	1N4148M		
C1157	1-124-464-11	ELECT	0. 22uF	20%	50V	D1152	8-719-987-63	DIODE	1N4148M		
C1158	1-137-442-11	FILM	0. 039uF	5%	50V	D1160	8-719-038-63	LED	SEL5220S-TH80	(FLAT)	
C1159	1-137-441-11	FILM	0. 027uF	5%	50V	D1161	8-719-038-63	LED	SEL5220S-TH80	(DANCE)	
01160	1-137-457-11	EIIM	0. 0027uF	EOV	50V	D1100	8-719-038-63	I ED	SEL5220S-TH80	(DODG)	
	1-157-457-11		0. 0027df 0. 0033dF	5% 20%	16V		8-719-038-63		SEL5220S-TH80		
	1-161-327-00		820PF	10%	50V		8-719-038-63		SEL5220S-TH80		
	1-161-379-00		0. 01uF		25V		8-719-987-63		1N4148M	(OLASSIO)	
	1-101-579-00		47uF	20% 20%	16V	V1171	0-119-901-03	DIODE	1N4140M		
61104	1-124-569-11	ELECI	47UF	20%	104			< FI HORE	SCENT INDICAT	'NR >	
C1165	1-124-257-00	FLECT	2. 2uF	20%	50V			\ I LOOIL	JOENT INDIGNI	OIL /	
	1-162-282-31		100PF	10%	50V	FI 601	1-517-259-11	INDICATO	OR TUBE, FLUOR	ESCENT	
	1-161-379-00		0. 01uF	20%	25V				OR TUBE, FLUOR		
	1-162-294-31		0. 001uF	10%	50V	161001	1 017 200 11	INDIONIC	M TODE, TEOOR	LOOLNI	
	1-124-234-00		22uF	20%	16V			< IC >			
C1503	1-124-234-00	ELECT	22uF	20%	16V	IC601	8-759-248-06	IC uPD	078042GF-053-3	B9	
C1508	1-161-379-00	CERAMIC	0.01uF	20%	25V	IC602	8-749-920-83	IC GP1	LU52XB		
C1509	1-126-163-11	ELECT	4. 7uF	20%	50V	IC1101	8-759-634-51	IC M52	218AP		
C1510	1-124-234-00	ELECT	22uF	20%	16V	IC1102	8-759-634-51	IC M52	218AP		
C1511	1-124-584-00	ELECT	100uF	20%	10V	IC1103	8-759-820-62	IC LB1	1639		
C1512	1-164-159-11	CFRAMIC	0. 1uF		50V	TC1104	8-759-916-12	IC SNO	74HCOOAN		
	1-164-159-11		0. 1uF		50V		8-759-000-48		14052BCP		
	1-124-584-00		100uF	20%	10V		8-759-065-87		-1096		
01011	1 121 001 00	EBEOT	10001	20%	101	101301	0 100 000 01	10 Ait	1030		
		< CONNECTOR >						< COIL >	>		
* CN601	1-568-830-11	SOCKET, CONNECT	OR 11P			L601	1-410-521-11	INDUCTOR	R 100ul	I	
		SOCKET, CONNECT					1-410-624-11				
		PIN, CONNECTOR					1-408-080-00				
		< COMPOSITION C	IRCUIT BLOCK	>				< TRANS	ISTOR >		
* CD603	1-233-216-11	COMPOSITION CIR	CULT RINCK			Q601	8-729-119-78	TRANSIST	ΓOR 2SC2785-	HEE	
		COMPOSITION CIR				Q602	8-729-119-78				
		COMPOSITION CIR				Q603	8-729-119-78				
011312	1 200 004 11	COURTITION OLD	OOTI DEOON			•	8-729-119-78				
		< DIODE >					8-729-141-26				
		/				4.105		2.2.10101	200022		
D601	8-719-987-63					Q1103	8-729-119-78	TRANSIS	TOR 2SC2785-	-HFE	
D602	8-719-987-63					Q1104	8-729-119-78	TRANSIST	TOR 2SC2785-	-HFE	
D603	8-719-987-63	DIODE 1N4148M				Q1105	8-729-119-78	TRANSIS	TOR 2SC2785-	-HFE	
D604	8-719-200-82	DIODE 11ES2				Q1121	8-729-900-61	TRANSIS	TOR DTA114ES	3	

## PANEL

Ref. No.	Part No.	Description			Re	nark	Ref. No.	Part No.	Description			Remark
Q1124	8-729-900-36	TRANSISTOR	- DTC124E	S			R640	1-249-408-11	CARBON	180	5%	1/4W
Q1125	8-729-900-36	TRANSISTOR	DTC124E	S			R641	1-249-409-11		220	5%	1/4W
	8-729-900-36		DTC124E				R642	1-249-410-11		270	5%	1/4W
	8-729-900-63		DTA124E				R643	1-249-411-11		330	5%	1/4W
	8-729-900-80		DTC114E				R644	1-249-413-11		470	5%	1/4W
Q1110	0 720 000 00	TRUNDIDION	DIOLITE				11044	1 243 413 11	OMIDON	470	370	1/411
01144	8-729-900-80	TRANSISTOR	DTC114E	S			R645	1-249-414-11	CARRON	560	5%	1/4W
-	8-729-900-61		DTA114E				R646	1-249-416-11		820	5%	1/4W
	8-729-900-36		DTC124E				R647	1-249-418-11		1. 2K		1/4W
	8-729-900-63		DTA124E				R648	1-249-421-11		2. 2K		1/4W
	8-729-119-78		2SC2785				R649	1-249-424-11		3. 9K		1/4W
Q1101	5 ,20 110 10	THERESISTOR	LUCLIOO				110 13	1 210 121 11	OTHEON	0. 511	0.0	17 111
Q1152	8-729-141-26	TRANSISTOR	2SC3622	A-LK			R653	1-249-388-11	CARBON	3. 9	5%	1/6W
-	8-729-119-78		2SC2785				R661	1-249-417-11		1K	5%	1/4W
	8-729-119-78		2SC2785				R662	1-249-417-11		1K	5%	1/4W
	8-729-119-78		2SC2785				R663	1-249-417-11		1K	5%	1/4W
<b>4</b>			2002100				R664	1-249-417-11		1K	5%	1/4W
		< RESISTOR >	•				11001	1 210 117 11	O'HIDON		0.0	1/ 111
							R665	1-249-417-11	CARBON	1K	5%	1/4W
R601	1-249-417-11	CARBON	1K	5%	1/4W		R666	1-249-417-11		1K	5%	1/4W
R603	1-249-437-11	CARBON	47K	5%	1/4W		R672	1-249-441-11		100K		1/4W
R604	1-249-433-11		22K	5%	1/4W		R673	1-249-409-11		220	5%	1/4W
R605	1-249-433-11	CARBON	22K	5%	1/4W			1-249-426-11		5. 6K		1/4W
R606	1-249-429-11		10K	5%	1/4W			1 210 120 11	ornibor.	0. 011	0.0	1/ 1"
					_,		R1103	1-249-431-11	CARBON	15K	5%	1/4W
R607	1-249-429-11	CARBON	10K	5%	1/4W			1-249-425-11		4. 7K		1/4W
R608	1-249-423-11		3. 3K	5%	1/4W				(A295)			_,
R609	1-249-417-11	CARBON	1K	5%	1/4W		R1104	1-249-429-11		10K	5%	1/4W
R610	1-249-425-11	CARBON	4. 7K	5%	1/4W				(D550)			•
R611	1-249-429-11	CARBON	10K	5%	1/4W		R1105	1-249-433-11	CARBON	22K	5%	1/4W
							R1106	1-249-424-11	CARBON -	3. 9K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W							•
R614	1-249-429-11	CARBON	10K	5%	1/4W		R1107	1-249-441-11	CARBON	100K	5%	1/4W
R615	1-249-433-11	CARBON	22K	5%	1/4W		R1108	1-249-427-11	CARBON	6.8K	5%	1/4W
R616	1-249-433-11	CARBON	22K	5%	1/4W		R1109	1-249-412-11	CARBON	390	5%	1/4W
R621	1-249-419-11	CARBON	1.5K	5%	1/4W		R1110	1-249-417-11	CARBON	1K	5%	1/4W
							R1111	1-249-441-11	CARBON	100K	5%	1/4W
R622	1-247-807-31	CARBON	100	5%	1/4W							
R623	1-249-406-11	CARBON	120	5%	1/4W		R1114	1-249-431-11	CARBON	15K	5%	1/4W
R624	1-249-406-11	CARBON	120	5%	1/4W		R1115	1-249-439-11	CARBON	68K	5%	1/4W
R625	1-247-811-31	CARBON	150	5%	1/4W		R1116	1-249-423-11	CARBON	3. 3K	5%	1/4W
R626	1-249-408-11	CARBON	180	5%	1/4W		R1117	1-249-440-11	CARBON	82K	5%	1/4W
							R1118	1-249-412-11	CARBON	390	5%	1/4W
R627	1-249-409-11	CARBON	220	5%	1/4W							
R628	1-249-410-11	CARBON	270	5%	1/4W		R1119	1-249-427-11	CARBON	6.8K	5%	1/4W
R629	1-249-411-11	CARBON	330	5%	1/4W		R1120	1-247-862-11	CARBON	20K	5%	1/4W
R630	1-249-413-11	CARBON	470	5%	1/4W		R1122	1-249-433-11	CARBON	22K	5%	1/4W
R631	1-249-414-11	CARBON	560	5%	1/4W		R1123	1-249-421-11	CARBON	2. 2K	5%	1/4W
							R1124	1-249-425-11	CARBON	4.7K	5%	1/4W
R632	1-249-416-11		820	5%	1/4W							
R633	1-249-418-11		1. 2K		1/4W		R1125	1-249-433-11	CARBON	22K	5%	1/4W
R634	1-249-421-11		2. 2K	5%	1/4W			1-249-420-11		1.8K	5%	1/4W
R635	1-249-419-11	CARBON	1.5K	5%	1/4W		R1127	1-249-440-11	CARBON	82K	5%	1/4W
R636	1-247-807-31	CARBON	100	5%	1/4W		R1128	1-249-412-11	CARBON	390	5%	1/4W
							R1129	1-249-427-11	CARBON	6.8K	5%	1/4W
R637	1-249-406-11		120	5%	1/4W							
R638	1-249-406-11		120	5%	1/4W			1-247-862-11		20K	5%	1/4W
R639	1-247-811-31	CARBON	150	5%	1/4W		R1131	1-249-434-11	CARBON	27K	5%	1/4W

## PANEL

Ref. No.	Part No.	Description			Remark	Re	f. No.	Part No.	Description			Remark
R1132	1-249-412-11	CARRON	390	5%	1/4W		R1199	1-247-874-11	CARBON	62K	5%	1/4W
	1-249-433-11		22K	5%	1/4W			1-249-418-11		1. 2K		1/4W
	1-249-412-11		390	5%	1/4W			1-247-881-00		120K		1/4W
	1-249-412-11		390	5%	1/4W			1-247-881-00		120K		1/4W
	1-249-412-11		390	5%	1/4W			1-249-406-11		12011		1/4W
N1130	1 243 412 11	CARDON	330	J <i>1</i> 0	1/411		111001	1 243 400 11	Ontbon	120	0.0	1/ 111
R1139	1-249-417-11	CARBON	1K	5%	1/4W		R1552	1-249-431-11	CARBON	15K	5%	1/4W
R1141	1-249-437-11	CARBON	47K	5%	1/4W				(A295)			
R1142	1-249-412-11	CARBON	390	5%	1/4W		R1552	1-249-433-11	CARBON	22K	5%	1/4W
R1143	1-249-427-11	CARBON	6.8K	5%	1/4W	i			(D550)			
	1-249-412-11		390	5%	1/4W		R1553	1-249-431-11	CARBON	15K	5%	1/4W
									(A295)			
R1149	1-247-874-11	CARBON	62K	5%	1/4W		R1553	1-249-433-11	CARBON	22K	5%	1/4W
R1152	1-249-426-11	CARBON	5. 6K	5%	1/4W				(D550)			
R1154	1-249-425-11	CARBON	4. 7K	5%	1/4W		R1554	1-249-423-11	CARBON	3. 3K	5%	1/4W
		(A295)				ĺ						
R1154	1-249-429-11	CARBON	10K	5%	1/4W		R1555	1-249-423-11	CARBON	3. 3K	5%	1/4W
		(D550)										
R1155	1-249-433-11	CARBON	22K	5%	1/4W				< COMPOSITION	CIRCUIT	BLOCK	>
D1150	1 040 404 11	CARRON	0.017	Ε0/	1 /400		DDC01	1 000 500 11	COMPOSITION C	IDCHIT D	יו טעג	
	1-249-424-11		3. 9K		1/4W				COMPOSITION C			
	1-249-441-11		100K		1/4W		KPOUZ	1-232-998-11	COMPOSITION	INCUII E	LUUK	
	1-249-427-11		6.8K		1/4W				< VARIABLE RE	cierob \		
	1-249-412-11		390	5%	1/4W				VARIABLE RE	31310K /	•	
R1160	1-249-417-11	CARBON	1K	5%	1/4W		DV1101	1_999_951_11	RES, VAR, CAR	RON 100k	7/100K	(SHBBOHND)
R1161	1-249-441-11	CARRON	100K	5%	1/4W	I			RES, VAR, CAR			
	1-249-431-11		15K	5%	1/4W	1			RES, VAR, CAR			
	1-249-439-11		68K	5%	1/4W			1 211 000 11	,,		,	,,,,,,,
	1-249-423-11		3. 3K		1/4W				< SWITCH >			
	1-249-440-11		82K	5%	1/4W				( D			
	1 210 110 11	Viniboli	0211	070	1/ 1//		S601	1-554-303-21	SWITCH, TACTI	LE (BAND	))	
R1168	1-249-412-11	CARBON	390	5%	1/4W		S602	1-554-303-21	SWITCH, TACTI	LE (SHIE	T)	
R1169	1-249-427-11	CARBON	6.8K	5%	1/4W		S603	1-554-303-21	SWITCH, TACTI	LE (- (I	OUAL MO	DE TUNING))
	1-247-862-11		20K	5%	1/4W		S604	1-554-303-21	SWITCH, TACTI	LE (+ ([	OUAL MO	DE TUNING))
	1-249-433-11		22K	5%	1/4W	-	S605		SWITCH, TACTI			
	1-249-421-11		2. 2K	5%	1/4W							
							S606	1-554-303-21	SWITCH, TACTI	LE (2 (F	PRESET	STATION))
R1174	1-249-425-11	CARBON	4.7K	5%	1/4W		S607		SWITCH, TACTI			
	1-249-420-11		1. 8K		1/4W		S608		SWITCH, TACTI			
	1-249-440-11		82K	5%	1/4W		S609		SWITCH, TACTI			
	1-249-412-11		390	5%	1/4W		S610	1-554-303-21	SWITCH, TACTI	LE (6 (I	PRESET	STATION))
	1-249-427-11		6.8K	5%	1/4W							
							S611	1-554-303-21	SWITCH, TACTI	LE (7 (I	PRESET	STATION))
R1180	1-247-862-11	CARBON	20K	5%	1/4W		S612	1-554-303-21	SWITCH, TACTI	LE (8 (1	PRESET	STATION))
R1181	1-249-434-11	CARBON	27K	5%	1/4W		S613	1-554-303-21	SWITCH, TACTI	LE (9 (1	PRESET	STATION))
R1183	1-249-437-11		47K	5%	1/4W		S614	1-554-303-21	SWITCH, TACTI	LE (0 (1	PRESET	STATION))
	1-249-437-11		47K	5%	1/4W		S616	1-554-303-21	SWITCH, TACTI	LE (MEMO	ORY)	
	1-249-437-11		47K	5%	1/4W							
							S617	1-554-303-21	SWITCH, TACT	LE (STE	REO/MON	(0)
R1189	1-249-417-11	CARBON	1K	5%	1/4W		S619		SWITCH, TACT			
R1191	1-249-437-11	CARBON	47K	5%	1/4W		S620	1-554-303-21	SWITCH, TACT	LE (TAP	E)	
R1192	1-249-412-11		390	5%	1/4W		S621	1-554-303-21	SWITCH, TACT	LE (CD)		
R1193	1-249-427-11		6.8K	5%	1/4W		S622		SWITCH, TACT		ER)	
R1194	1-249-433-11	CARBON	22K	5%	1/4W	į						
							S623	1-554-303-21	SWITCH, TACT	LE (PHO	NO)	
R1195	1-249-425-11	CARBON	4. 7K	5%	1/4W		S625	1-554-303-21	SWITCH, TACT	LE (FLA	T)	
R1196	1-249-425-11	CARBON	4.7K	5%	1/4W		S626	1-554-303-21	SWITCH, TACT	LE (DAN	CE)	

## PANEL POWER PO

## POWER AMPLIFIER

Ref. No.	Part No.	Description	Remark
S628	1-554-303-21	SWITCH, TACTILE (POPS) SWITCH, TACTILE (ROCK) SWITCH, TACTILE (CLASSIC)	
		< VIBRATOR >	
		VIBRATOR, CERAMIC (4.19MHz)	****
*	1-650-434-11	POWER BOARD (A295) *********	
*		TERMINAL (WITH BASE) (E, PX) HOLDER, FUSE	
		< CAPACITOR >	
	1-161-744-51 1-164-159-11		400V 50V
		< connector >	
		PIN, CONNECTOR (PC BOARD) 3P PIN, CONNECTOR 2P	
		< FUSE >	
⚠F1301 ⚠F1302 ⚠F1303 ⚠F1303 ⚠F1304	1-576-108-11   1-532-350-00   1-532-350-00   1-576-108-11   1-532-350-00	FUSE (4A/125V) (EXCEPT Canadian) FUSE (4A/125V) (Canadian) FUSE (4A/125V) (EXCEPT Canadian) FUSE (4A/125V) (Canadian) FUSE (4A/125V) (Canadian) FUSE (4A/125V) (EXCEPT Canadian) FUSE (4A/125V) (Canadian)	).
		< RESISTOR >	
R1391	1-202-725-00 \$	SOLID 3.3M 10% 1/2 (Canadian)	2W
		< TRANSFORMER >	
⚠T1301 1 ⚠T1301 1	I-423-915-11 T I-423-917-11 T	RANSFORMER, POWER (AEP, UK, G, IT) RANSFORMER, POWER (E, AUS, MX, PX) RANSFORMER, POWER (Canadian)	

Ref. No.	Part No.	Description		Rema	ark
*	A-4365-902-A	POWER AMPLIFIER			IIIV)
*	A-4365-923-A	POWER AMPLIFIER	BOARD, COMPE		
*	A-4365-931-A	POWER AMPLIFIER		AUS. MX,	,
*		POWER AMPLIFIER			
		*****	******	***	
		< CAPACITOR >			
C1201	1-124-925-11	ELECT	2. 2uF	20%	100V
C1202	1-162-286-31	CERAMIC	220PF	10%	50V
C1203	1-162-286-31	CERAMIC	220PF	10%	50V
		(A295)			
C1204	1-124-910-11		47uF	20%	50V
C1205	1-124-910-11	ELECT	47uF	20%	50V
C1206	1-124-122-11	ELECT (A295)	100uF	20%	50V
C1206	1-124-929-11	, ,	22uF	20%	100V
01200	1 124 323 11	(D550)	LLui	20 <i>1</i> 0	1001
C1207	1-136-165-00	, ,	0. 1uF	5%	50V
C1208	1-124-916-11			20%	63V
		(A295)			
C1208	1-124-979-11	ELECT	33uF	20%	6. 3V
		(D550)			
24000	4 400 405 00		0.4.5	=	<b>=</b> 011
C1209	1-136-165-00			5% =~	50V
C1210	1-136-163-00			5%	50V
C1211	1-136-163-00			5%	50V
C1220	1-124-917-11	(A295)	33uF	20%	63V
C1220	1-124-927-11		4. 7uF	20%	100V
01220	1 124 327 11	(D550)	7. rui	2070	1001
C1230	1-161-494-00		0. 022uF		25V
C1231	1-161-494-00	(G, IT)	0. 022uF		25V
01231	1-101-494-00	(G, IT)	u. uzzur		237
C1232	1-161-494-00		0. 022uF		25V
01202	1 101 101 00	(G, IT)	0. 022di		201
C1251	1-124-925-11	ELECT	2. 2uF	20%	100V
C1252	1-162-286-31			10%	50V
C1253	1-162-286-31		220PF	10%	50V
C1254	1-124-910-11	(A295)	47uF	200v	50V
C1255	1-124-910-11			20% 20%	50V
C1256	1-124-122-11			20%	50V
01200	. 161 166 11	(A295)	10001	L U A)	001
C1256	1-124-929-11		22uF	20%	100V
		(D550)	,	•	
04.5==	4 400 15- 5-	n			
C1257	1-136-165-00			5% =~	50V
C1260	1-136-163-00			5% -~	50V
C1261	1-136-163-00			5%	50V
C1280	1-161-494-00		0. 022uF		25V
		(G, IT)			

The components identified by mark  $\Lambda$  or dotted line with mark.  $\Lambda$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## POWER AMPLIFIER

Ref. No.	Part No.	Description			Ren	nark	ı	Ref. No.	Part No.	Description			Ren	nark
		< CONNECTOR >						R1212	1-249-431-11	CARBON (A295)	15K	5%	1/4W	
* CN1203	1-564-518-11	PLUG, CONNECTOR	3P					R1212	1-249-435-11	, ,	33K	5%	1/4W	
		< DIODE >						R1213	1-249-441-11	CARBON	100K	5%	1/4W	
								R1214	1-249-421-11	CARBON	2. 2K	5%	1/4W	
	8-719-815-85	·								(A295)				
	8-719-987-63							R1214	1-249-424-11		3. 9K	5%	1/4W	
	8-719-987-63 8-719-987-63									(D550)				
	8-719-967-03							R1215	1-249-421-11	CARBON	2. 2K	5%	1/4W	
D1201	0 /10 010 00	101000 (	D000)					MILLO		(A295)			-,	
D1251	8-719-987-63	DIODE 1N4148M	(A295)					R1215	1-249-424-11	CARBON	3. 9K	5%	1/4W	
										(D550)				
		< IC >						R1216	1-249-421-11		2. 2K	5%	1/4W	
7.01.001	0.740,000,00	TO OTIV A1 A0MIZO	(C	1: A	ed III	ר זיז	r\	D1016	1-249-424-11	(A295)	3. 9K	E0/	1/4W	
	8-749-900-96 8-749-920-09					u, 11	9	H1210	1-249-424-11	(D550)	3. 3N	3/6	1/4W	
	8-749-921-68			ω, ιιμι,	1 Λ)			R1217	1-249-421-11		2. 2K	5%	1/4W	
101201	0 / 10 021 00		(02)							(A295)				
		< TRANSISTOR >												
		•						R1217	1-249-424-11		3. 9K	5%	1/4W	
•	8-729-140-84		1841-PA					D4 04 0	1 040 000 11	(D550)	10	E0/	1 /400	
~	8-729-900-80 8-729-119-78		114ES 2785-HF					R1218	1-249-393-11	(A295)	10	5%	1/4W	
~	8-729-119-76		2765-11 1841-P					R1218	1-249-397-11		22	5%	1/4W	
Q1201	0 723 140 04	TIEMBIBION 250	1011 11	II /IL/I				RILLIO	1 210 007 11	(D550)	22	0.0	1/ 1//	
		< RESISTOR >						R1219	1-249-397-11	CARBON	22	5%	1/4W	
										(D550)				
	1-249-417-11				1/4W			R1227	1-249-429-11	CARBON	10K	5%	1/4W	
	1-249-438-11				1/4W			D1 000	1 247 001 00	CADDON	1201/	E0/	1/4W	
	1-249-414-11 1-249-438-11				1/4W 1/4W				1-247-881-00 1-249-428-11		120K 8. 2K	5% 5%	1/4W	
	1-249-425-11				1/4W			HILLS	1 243 420 11	(D550)	0. 211	070	1/ 111	
		(A295)			-,			R1229	1-249-437-11		47K	5%	1/4W	
										(A295)				
R1205	1-249-429-11		10K 5	5%	1/4W			R1230	1-249-439-11		68K	5%	1/4W	
D1206	1-249-425-11	(D550)	1717 1	50v	1 //192			D1 991	1-249-417-11	(A295)	1K	5%	1/4W	
R1206	1-249-425-11	(A295)	4.7K	J <i>7</i> 6.	1/4W			K1Z31	1-249-417-11	(A295)	TV	, J/0	1/411	
R1206	1-249-429-11		10K 5	5%	1/4W					(11200)				
		(D550)			·			R1232	1-249-434-11	CARBON	27K	5%	1/4W	
R1207	1-249-425-11		4.7K	5%	1/4W					(A295)				
D400#		(A295)						R1238	1-247-903-00		1M	5%	1/4W	
R1207	1-249-429-11		10K	5%	1/4W			D1000	1-249-433-11	(D550)	22K	5%	1/4W	
		(D550)						N1230	1-249-433-11	(A295)	ZZN	J/0	1/411	
R1208	1-249-425-11	CARBON	4.7K	5%	1/4W			R1239	1-249-426-11		5. 6K	5%	1/4W	
		(A295)			-,					(A295)			-,	
R1208	1-249-429-11	CARBON	10K	5%	1/4W			<u></u> 1243 <u>№</u> 1243	1-249-389-11	CARBON	4. 7	5%	1/4W	F
		(D550)												
	1-212-881-11			5%	1/4W				1-249-417-11		1K	5%	1/4W	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1-217-151-00	METAL PLATE (A295)	0. 22		2W	F			1-249-438-11 1-249-414-11		56K 560	5% 5%	1/4W 1/4W	
∕î\R1210	1-217-611-00	· ·	0.1		2W	F			1-249-438-11		56K	5%	1/4W	
		(D550)				-			1-249-425-11		4. 7K		1/4W	
										(A295)				
R1211	1-249-417-11	CARBON	1K !	5%	1/4W									

The components identified by mark  $extstyle \Omega$  or dotted line with par une marque  $extstyle \Omega$  sont mark. 🛕 are critical for safety. Replace only with part number specified.

critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## POWER AMPLIFIER

## **POWER PRIMARY**

## **POWER SECONDARY**

SW

TABLE MOTOR

Ref. No.	Part No.	Description			Re	mark	Ref. No.	Part No.	Description Remark
R1255	1-249-429-11	CARBON (D550)	10K	5%	1/4W		*	1-651-320-11	POWER SECONDARY BOARD (D550)
R1256	1-249-425-11		4. 7K	5%	1/4W			1-533-217-31	HOLDER, FUSE
R1256	1-249-429-11	CARBON (D550)	10K	5%	1/4W				< CAPACITOR >
R1257	1-249-425-11	` '	4. 7K	5%	1/4W		C1348	1-161-159-11	
R1257	1-249-429-11	CARBON (D550)	10K	5%	1/4W				< FUSE >
R1258	1-249-425-11	, ,	4. 7K	5%	1/4W		<del></del>		FUSE (4A/125V) FUSE (4A/125V)
R1258	1-249-429-11		10K	5%	1/4W		<u>/1/</u> 11202	1 370 100 11	< RESISTOR >
<del></del>	1-212-881-11	FUSIBLE	100	5%	1/4W				
<u>∧</u> R1260	1-217-151-00	METAL PLATE (A295)	0. 22		2W	F	_	1-212-934-00 ******	FUSIBLE 1 5% 1/2W F
<u>∧</u> R1260	1-217-611-00	METAL PLATE (D550)	0.1		2W	F	*	1-650-504-11	SW BOARD *******
	1-249-417-11 1-249-431-11		1K 15K	5% 5%	1/4W 1/4W				< CONNECTOR >
R1262	1-249-435-11	(A295) CARBON	33K	5%	1/4W		* CN951	1-568-942-11	PIN, CONNECTOR 4P
R1263	1-249-441-11	(D550) CARBON	100K	5%	1/4W				< SWITCH >
24000				<b></b>			~~		
R1268	1-249-393-11	CARBON (A295)	10	5%	1/4W		S951	1-692-785-11	SWITCH, PUSH (3 KEY) (DOLBY NR/TYPE SELET/DUBBING SPEED)
R1268	1-249-397-11	CARBON (D550)	22	5%	1/4W		S951	1-692-786-11	(EXCEPT E, AUS, MX, PX) SWITCH, PUSH (2 KEY)
R1269	1-249-397-11	CARBON (D550)	22	5%	1/4W				(TAPE SELECT/DUBBING SPEED) (E, AUS, MX, PX)
******	******	******	*****	*****	*****	****	******	******	***********
*	1-650-485-11	POWER PRIMARY B	•	0550)			*	1-638-729-11	TABLE MOTOR BOARD ************************************
	1-533-217-31	HOLDER, FUSE							< CAPACITOR >
		< CAPACITOR >					C704	1-161-375-00	CERAMIC 0. 0022uF 20% 50V
<u></u> €C1301	1-161-744-51	CERAMIC	0. 01ul	7		400V			< CONNECTOR >
		< CONNECTOR >					* CN707	1~573~044-11	SOCKET, CONNECTOR 5P
		PIN, CONNECTOR PIN, CONNECTOR	•	ARD) 31	)				< PHOTO SENSOR >
		< FUSE >					D701	8-719-970-19	PHOTO SENSOR GP-1A521
<u></u> <b>♠</b> F1211	1-576-108-11	FUSE (4A/125V)							< RESISTOR >
		< RESISTOR >						1-249-416-11 *******	CARBON 820 5% 1/4W
R1 201	1-202-725-00	01 102	3. 3M	10%	1/2W				
		*********** Ortin			•	****			

The components identified by Les composants identifiés mark <u>A</u> or dotted line with mark.  $\underline{\Lambda}$  are critical for safety. Replace only with part number specified.

par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS				*******	
		*******				RDWARE LIST	
-	1 500 576 11	WIDE FLAT TVDE (11 CODE)			****	*******	*
5 6		WIRE, FLAT TYPE (11 CORE) WIRE (FLAT TYPE) (23 CORE)		#1	7_691_955_15	SCREW +P 2X3	
		CORD, CONNECTION (17 CORE)		#1		SCREW +B 2, 6X5	
7 A 1 4			,	#2			DOTAN
<u>1</u> 14 ∧ 15		CORD, POWER (E, MX, PX)				RING, RETAINING, CAI SCREW +B 3X25	FSTAIN
<u>î\</u> 15	1-0/0-001-11	CORD, POWER (AEP, G, IT)		#4 #5		SCREW +BVTP 3X16 TY	DEO N.C
A 16	1_606_570_21	CODD DOWED (HK)		#3	7-000-000-79	SOUTH ADAIL SVIO III	rLZ N-3
<u>1</u> 16		CORD, POWER (UK) CORD, POWER (AUS)		#6	7_685_103_10	SCREW +P 2X5 TYPE2 1	NON_SI IT
<u>1</u> 17 ♠ 10		CORD, POWER (US, Canadian)		#7		SCREW +P 2.6X6 TYPE:	
<u>1</u> 18			۷)	#8		SCREW +P 2. 0X0 TIPE.	
<u>1</u> 22 ∗ 58		ADAPTOR, CONVERSION 2P (P) CORD (WITH CONNECTOR) (D55		#9		SCREW +BTP 2. 6X10 T	
. 10	1-030-700-11	CORD (WITH CONNECTOR) (D3	JU)	#10		SCREW +P 2. 6X12 TYP	
58	1_765_059_11	CORD (WITH CONNECTOR) (A29	05)	#10	7 003 130 13	SUILW I Z. UNIZ III	LZ NON BEIT
107	1-452-538-11		33)	#11	7-685-646-70	SCREW +BVTP 3X8 TYP	F2 N_C
158		WIRE (FLAT TYPE) (7 CORE)		#11		SCREW +BVTP 3X10 TY	
167		JUMPER, FILM (WITH TERMINA	AI)	#12	7-688-001-01		ILZ N S
169		WIRE, FLAT TYPE (5 CORE)	AL)	#14		SCREW, TAPPING	
103	1 330 043 11	white, real life (3 cone)		#15		SCREW +BVTT 3X6 (S)	
<u>^</u> 201	8-848-144-11	DEVICE, OPTICAL KSS-240A		#10	7 002 347 03	BOILEN DVII JAO (B)	
202		WIRE, FLAT TYPE (12 CORE)		#16	7-682-548-04	SCREW +BVTT 3X8 (S)	
		FUSE (4A/125V) (US)		#17		SCREW +PSW 4X8	
		FUSE (4A/125V) (US)		#17		SCREW +BVTT 4X6	
		FUSE (4A/125V) (US)		#10	7 000 000 01	DONEW DVII TAO	
<u> </u>	1 070 100 11	1002 (41) 1201) (00)		*****	*********	*******	*******
<b></b> ↑F1301	1-532-350-00	FUSE (4A/125V) (EXCEPT US,	Canadian)				
		FUSE (4A/125V) (Canadian)	,,		ACCESSORIE	S & PACKING MATERIAL	S
		FUSE (4A/125V) (EXCEPT US,	Canadian)			*******	
		FUSE (4A/125V) (Canadian)	,,				
		FUSE (4A/125V) (EXCEPT US,	Canadian)		1-467-430-11	COMMANDER, STANDARD	(RM-S221)
		, , , , ,	,			ANTENNA, LOOP (AEP1,	
<b>1</b> F1303	1-576-108-11	FUSE (4A/125V) (Canadian)				ANTENNA (AEP1, IT)	,
		FUSE (4A/125V) (EXCEPT US,	Canadian)			COVER (MLY), BATTER	Y (For RM-S221)
<b>1</b> F1304	1-576-108-11	FUSE (4A/125V) (Canadian)		*		CUSHION (HALF)	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DI	ECK B)				
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK	A)		3-758-285-41	MANUAL, INSTRUCTION	
						(ENGLISH, FRENCH, SPA	NISH, PORTUGUESE)
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (I	DECK B)			(AEP1)	
M101	X-4917-504-1	MOTOR ASSY (SLED)			3-758-285-51	MANUAL, INSTRUCTION	
M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINI	DLE MOTOR)			(GERMAN, DUTCH, SWEDI	SH, ITALIAN) (AEP1, I
M701		MOTOR ASSY, ROTARY			3-758-285-61	MANUAL, INSTRUCTION	
M702		MOTOR ASSY, LOADING				(AEP1)	
		•		*	4-963-173-01	CUSHION	
M901	X-3362-377-1	MOTOR (WH) ASSY		*		INDIVIDUAL CARTON (	AEP1, IT)
S701		SWITCH, PUSH (WITH CONNECT	TOR) (DOWN)			,	
		SWITCH, PUSH (AC POWER) (					
<u>1</u> S1302	1-570-046-21	SWITCH, VOLTAGE CHANGE					
		(VOLTAGE SELECTOR) (E, PX)					
<b>1</b> 1301	1-423-916-11	TRANSFORMER, POWER (US)					

The components identified by mark A or dotted line with mark. A are critical for safety. Replace only with part number specified.

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Sony Corporation
Audio Group

# HCD-A295/D550

# SONY. SERVICE MANUAL

US Model

HCD-D550

Canadian Model

AEP Model

UK Model

E Model

Australian Model

PX Model

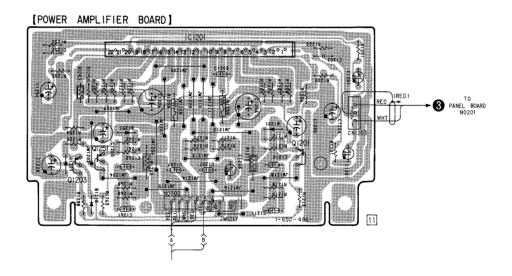
HCD-A295

Correct your service manual as shown below.

**CORRECTION-1** 

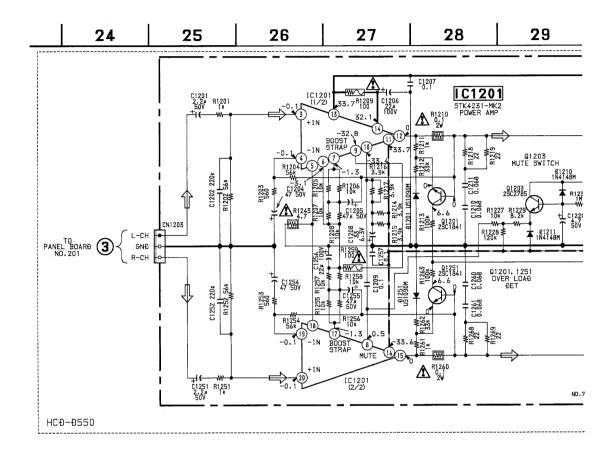
• The correct pin No. of IC1201 on Printed Wiring Board (Power Amplifier Board) as follows. (HCD-D550 only)

Page 30



◆ The correct pin No. of IC1201 on Schematic Diagram (Power Amplifier Board) as follows.
 (HCD-D550 only)

Page 34, 35



# PS-LX56/LX56P

# SERVICE MANUAL

Ver 1.1 2001, 07

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/ A295/A390/A390K/A395/ A490/A490K/A495/D150/ D250/D550/G1000/G2000.

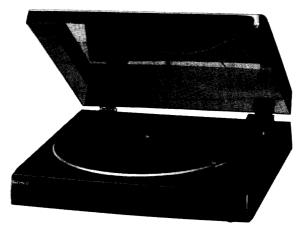


PHOTO: PS-LX56

US Model Canadian Model PX Model Tourist Model PS-LX56 AEP Model E Model

Australian Model

UK Model PS-LX56P

PS-LX56/LX56P

#### **SPECIFICATIONS**

Turntable Platter

Motor Drive system Speed Wow and flutter Signal-to-noise ratio

Automatic system

Pivot-to-stylus length Overall arm length

Cartridge

Туре Frequency response Stylus

General

Dimensions

Weight

Power requirement

Power consumption Accessory supplied Optional accessories (PS-LX56)

30cm (12 in.) DC servo motor Belt drive 33 1/3 rpm/45 rpm switchable 0.2% (WRMS) 60 dB (DIN-B) Return, reject

Dynamically blanced 203 mm (8 in.) 235 mm (9 1/4 in.)

Moving magnet type 20 Hz-20kHz CN-234

 $355 \times 94 \times 345 \text{ mm(w/h/d)}$  $(14 \times 3^3/_4 \times 13^5/_8 \text{ inches})$ Approx. 2.5 kg (5 lb 8 oz)

US and Canadian model :120V AC, 60Hz European model: 220-230V AC, 50/60Hz

Australian model: 240V AC, 50Hz Model for other countries: 110-120V/220-240V adjustable with the voltage selector AC, 50/60Hz

2 W 45-rpm adaptor (1) Replacement stylus CN-234 Stat spray XP-C10 Cleaner XP-C1, XP-C2

**Turntable** 

Platter Tone arm type Cartridge type Stylus Mass Dimensions

(PS-LX56P)

30 cm Dynamically balanced Moving magnet type Sony CN-234 (0.6 mil diamond) Approx. 2.3 kg (5 lb 1 oz) Approx. 355 x 95 x 345 mm  $(14 \times 3^3)_4 \times 13^5$ , inches) (w/h/d, including projections)

Design and specifications subject to change without notice

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression

> STEREO TURNTABLE SYSTEM SONY

9-959-216-12

2001G0200-1

© 2001.7

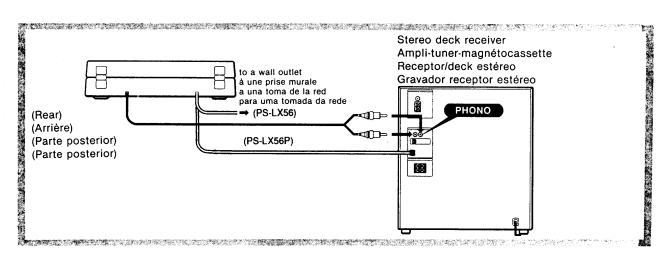
**Sony Corporation Home Audio Company** 

Shinagawa Tec Service Manual Production Group

## **Connections**

#### Note

Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



#### Notes on installation

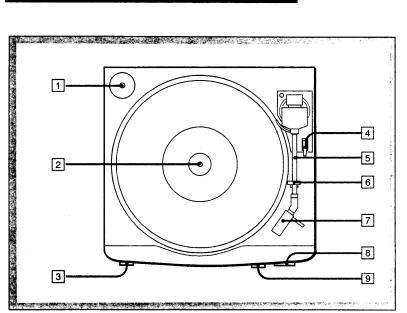
- · Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

### To remove the dust cover

Α

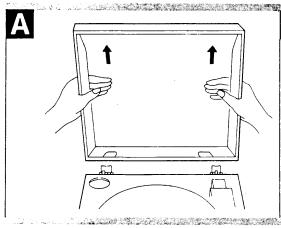
Open the cover fully and pull it up.

## **Location of Controls**

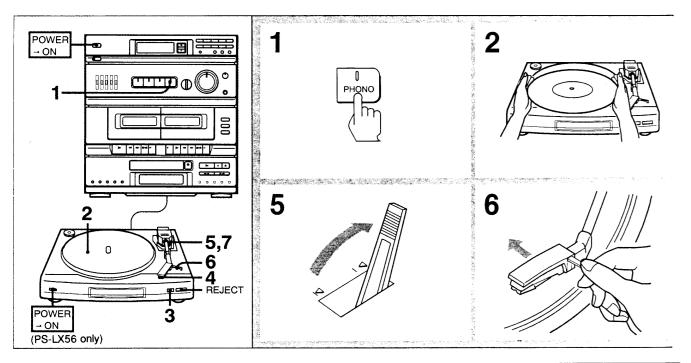


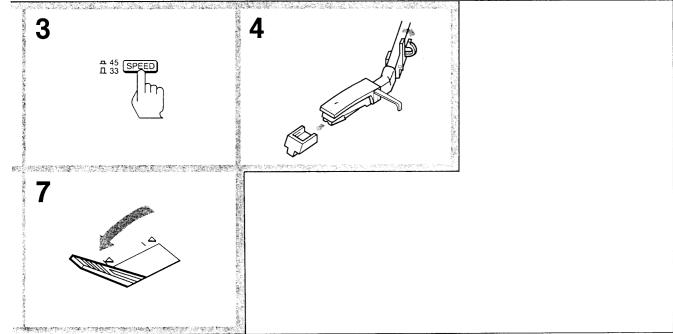
#### Nota

Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).



- 1 45-rpm adaptor
- 2 Centre spindle
- 3 POWER switch (PS-LX56)
- 4 Cueing lever
- 5 Tonearm
- 6 Armrest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

## To play a different part of the record

Lift the tonearm by setting the cueing level to  $\underline{\mathbb{Y}}$ , move the tonearm by hand to the desired point, then set the cueing lever to  $\underline{\mathbb{Y}}$ .

To play a 17-cm record
Use the supplied adaptor

# If the tonearm moves outward when you move it colse to the centre

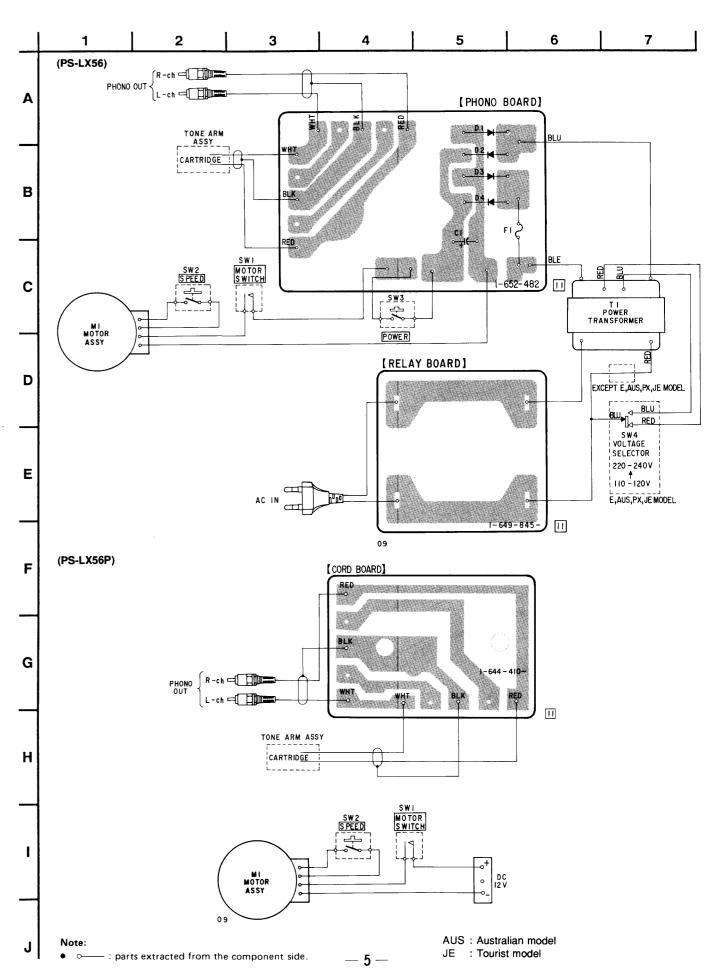
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest Press REJECT.

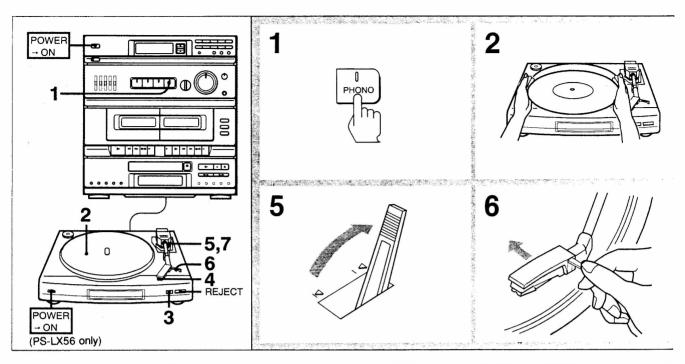
## SCHEMATIC DIAGRAMS

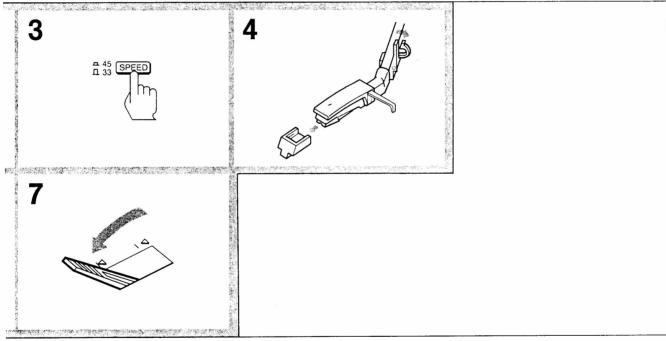
## · Switches : (PS-LX56) Ref. No. | Switch | Position SW1 MOTOR OFF SW2 SPEED 33 SW3 POWER OFF (PHONO BOARD) MOTOR ASSY MI EXCEPT E, AUS, PX, JE Model CARTRIDGE (PS-LX56P) MOTOR ASSY MI [CORD BOARD] 8.3 SW2 SPEED 45 D CARTRIDGE PHONO OUT • All capacitors are in μF unless otherwise The components identified by mark A noted. pF:μμF 50WV or less are not Ref. No. Switch Position SW1 MOTOR OFF or dotted line with mark ∆ are critical for indicated except for electrolytics and Replace only with part number specified. SW2 SPEED 33 • All resistors are in $\Omega$ and 1/4W or less SW3 POWER OFF unless otherwise specified. Les composants identifiés par une VOLTAGE 240V marque $\Delta$ sont critiques pour la SW4 AUS: Australian model SELECTOR sécurité. JE : Tourist model Ne les remplacer que par une pièce portant le numéro spéci-fié.

## WIRING DIAGRAMS



## **Playing Records**





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

To play a different part of the record

Lift the tonearm by setting the cueing level to  $\underline{\Psi}$ , move the tonearm by hand to the desired point, then set the cueing lever to  $\underline{\Psi}$ .

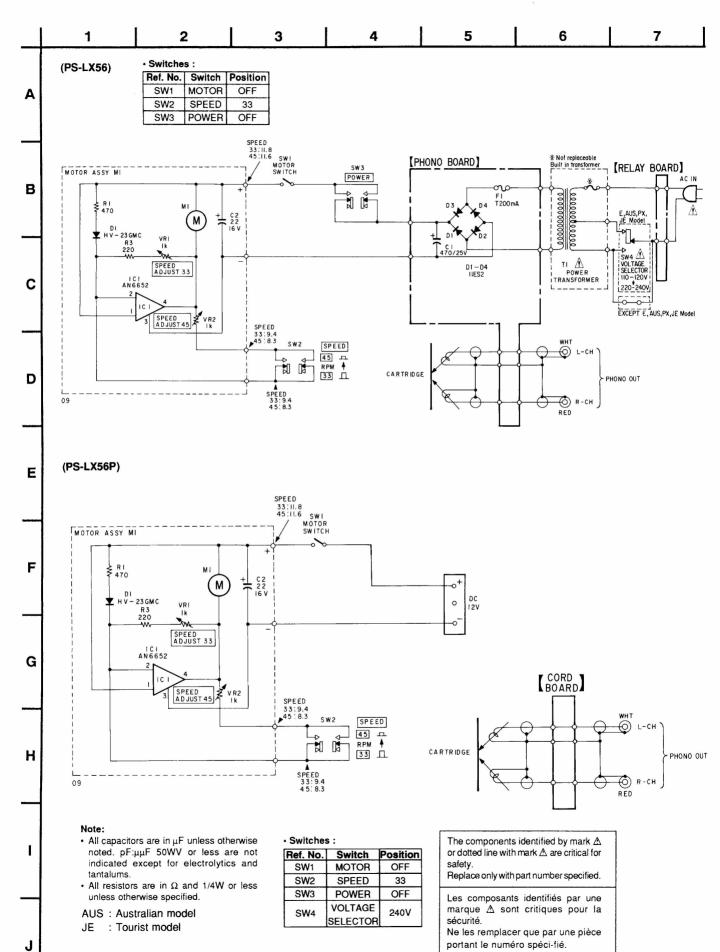
To play a 17-cm record Use the supplied adaptor

If the tonearm moves outward when you move it colse to the centre

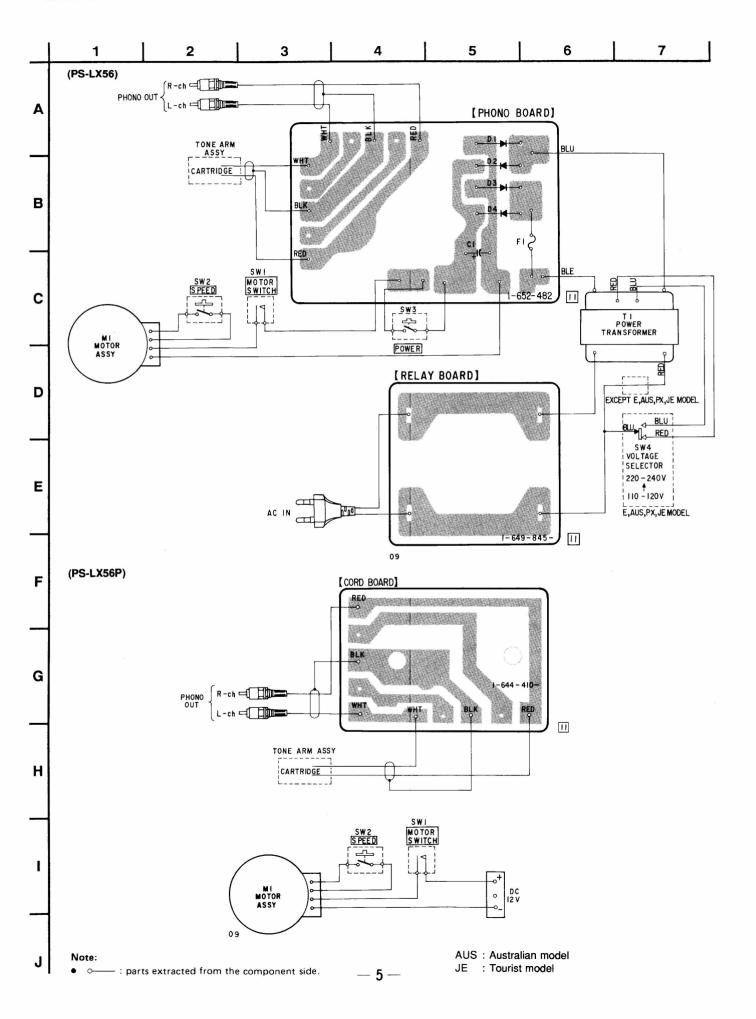
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest Press REJECT.

## SCHEMATIC DIAGRAMS



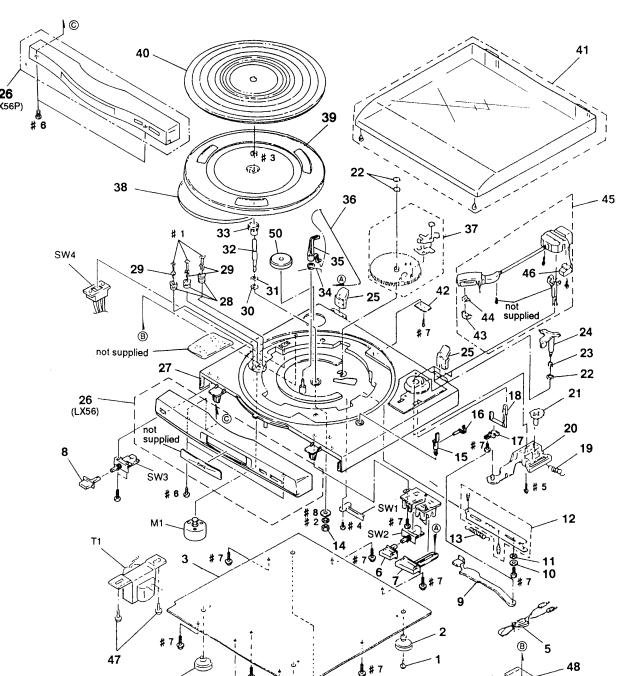
## **WIRING DIAGRAMS**



Ver 1.1 2001.07 Ver 1.1 2001.07 Ver 1.1 2001.07

### **EXPLODED VIEW**

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- AUS : Australian model The components identified by mark • CND : Canadian model ⚠ or dotted line with mark ⚠ are • EE : East European model critical for safety. Replace only with part number • IT : Italian model specified.
- MX : Mexican model • EA : Saudi Arabia model Les composants identifiés par une marque A sont critiques pour la • SP : Singapore model sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. MY : Malaysia model JE : Tourist



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
$\frac{1}{2}$	4-950-497-01 4-950-490-01	FOOT SEAT PLASTIC STAND		39 40	4-947-494-01 4-947-539-01	TURNTABLE PLATTER RUBBER MAT	
* 3 <u>^</u> 4 <u>^</u> 4	4-961-804-01 1-575-651-61	BUTTON BOARD CORD, AC (LX56: AEP, EA, EE, IT, MX, MY,	CIS, SP)	41 * 42	1-652-482-11	DUST COVER ASSY PHONO BOARD (LX56)	
		CORD, AC (LX56: CND, US)		* 42		CORD BOARD (LX56P)	
<u>↑</u> 4 <u>↑</u> 4	1-690-608-11	CORD, AC (LX56: E) CORD, AC (LX56: AUS)		43 44	4-951-290-01	COVER, CARTRIDGE STYLUS (CN-234)	
∆∆4 5	1-555-116-11	CORD, AC (LX56: UK) CORD, PHONO(BLACK) KNOB SPEED(BLACK)		45 46 47		ARM ASSY, TONE COUNTER WEIGHT SCREW (LX56)	
6	4-964-177-11 4-964-177-11	,		* 48	1-649-845-11	RELAY BOARD (LX56)	
7		(LX56:SILVER, SILVER MET. KNOB REJECT(BLACK)	ALLIC)	49 50	3-701-806-00		
Ż	4-964-178-11		ALLIC)	M1 SW1	A-4604-945-A 1-570-666-11	MOTOR ASSY SWITCH (LEAF)	
8 8	4-964-184-01 4-964-184-11	KNOB POWER (LX56:BLACK)		SW2 SW3	1-571-089-11 1-692-211-11	SWITCH, PUSH (SPEED SWITCH, PUSH (POWER	) (1 KEY) ) (1 KEY)(LX56)
Ü	. , , ,	(LX56:SILVER, SILVER MET	'ALLIC)	<u>1</u> \S₩4 <u>1</u> \T1	1-692-835-11 1-450-987-11	VOLTAGE SELECTOR (L. TRANSFORMER, POWER	X-56: AUS, E, MX, MY, SP) (LX56: AEP, EE, IT, CIS)
9 10	4-947-487-01 4-890-173-00	RETURN LINK WASHER		<u>^</u> T1	1-450-987-21	TRANSFORMER, POWER (LX56	: AUS, E, PX, EA, JE, MX, SP)
11 12		RETURN ASSY, LEVER		<u>∧</u> T1		TRANSFORMER, POWER	
13 14	4-947-485-01 4-947-510-01	• •		<u>↑</u> T1	1-450-967-41	TRANSFORMER, POWER	(LASO: U, CA)
15 16	4-947-491-01						
17 18		CUEING (BASE) LEVER, CUEING					
19	4-963-537-01						
20 21	4-963-536-01 4-963-535-01	ADJUST CAM					
22 23	4-947-514-01 4-947-467-01						
24 25	4-947-466-01 A-4660-498-A	TONE ARM ELEVATOR HINGE ASSY					
26 26	A-4384-982-A A-4411-941-A	PANEL (B) ASSY, FRONT (LX56: SILV PANEL (B) ASSY, FRONT					
26	A-4660-577-A	(LX56: SILVER METAL) FRONT PANEL (G) ASSY (LX56: GRAY) (U					
26 26		FRONT PANEL (G) ASSY (LX56: BLACK) FRONT PANEL (G) ASSY (LX56P)					
* 27 * 27		MAIN CABINET (B)(BLACK) MAIN CABINET (B)					
28	4-947-505-01	(LX56:SILVER, SILVER MET CUSHION MOTOR	TALLIC)				
29	4-947-504-01						
30 31	3-451-162-00 3-701-445-21	WASHER					
32 33	4-947-498-01 4-947-497-01	GEAR					
34 35	4-947-496-01 4-947-495-01	WIPER REJECT					
36 37	4-948-101-01 A-4604-916-A	SPRING (38) GEAR ASSY, SPUR					
38	4-947-503-01	BELT					

-7-

# CORD | PHONO | RELAY

## **ELECTRICAL PARTS LIST**

list may be different from the parts specified in the diagrams or the components used on the set.

• Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
- CAPACITORS
- COILS
- $uH: \mu H$
- IT : Italian model

- The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number
  - specified. Les composants identifiés par une marque 🛕 sont critiques pour la sécurité.
  - Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P) ********	)				& PACKING MATERIALS	
******	******	*******	*******	******			MANUAL INSTRUCTION	) (5 5 )
*	1-652-482-11	PHONO BOARD (LX56)	)			3-758-045-21 3-758-045-41	French, Spanish, Portug MANUAL INSTRUCTION (I MANUAL INSTRUCTION erman, Dutch, Swedish, I	English)(LX56 US,UK)
		< CAPACITOR >					MANUAL INSTRUCTION	
C1	1-126-012-11	ELECT 470	)uF	16V		3-758-045-61		nch, Spanish, Chinese) E, PX, MX, EA, MY, SP, JE)
		< DIODE >						Polish) (LX56 EE, CIS)
D1 D2 D3 D4	8-719-200-82 8-719-200-82 8-719-200-82 8-719-200-82	DIODE 11ES2 DIODE 11ES2			*	4-947-532-01 4-947-533-01 3-701-806-00	SNOW BOX (R) ADAPTOR, 45	
		< FUSE >			*****	******	*********	********
<u></u> ∱F1	1-532-613-XX	FUSE TIME-LAG (T20	00mA)			HARDV	*********** VARE LIST *******	
******	******	********	******	******	#1	7-621-773-87	SCDEW (64)	
*	1-649-845-11	RELAY BOARD (LX56) *******	· 		#2 #3 #4	7-623-210-22 7-624-110-04	WASHER (57) 6MM E RING	
*****	*******	********	*******	******	#4 #5	7-685-105-01 7-685-645-79		
					#6 #7 #8	7-685-646-79 7-685-647-79 7-688-005-01	SCREW (58)	

Remark

- Due to standardization, replacements in the parts
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
- All resistors are in ohms METAL: Metal-film resistor METAL OXIDE: Metal Oxide-film resistor F: nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- In each case, u:  $\mu$ , for example: uA...;  $\mu$  A..., uPA...;  $\mu$  PA..., uPB...:  $\mu$  PB..., uPC...:  $\mu$  PC...,
- uPD...: μPD...
- $uF: \mu F$
- AUS : Australian model
- CND : Canadian model • EE : East European model
- MX : Mexican model • EA : Saudi Arabia model • SP : Singapore model
  - MY : Malaysia model • JE : Tourist

### **EXPLODED VIEW**

#### NOTE:

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- AUS: Australian modelCND: Canadian modelEE: East European model

: Italian model

- MX : Mexican model
  EA : Saudi Arabia model
  SP : Singapore model
- SP : Singapore modelMY : Malaysia model
- JE : Tourist

• IT

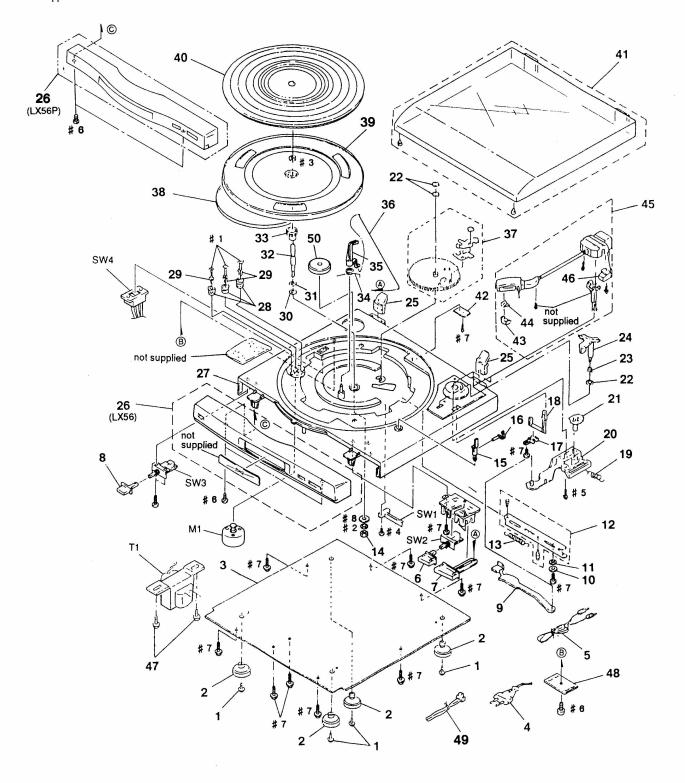
The components identified by mark  $\hat{\Delta}$  or dotted line with mark  $\hat{\Delta}$  are critical for safety

And of dotted fine with mark An are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.

Ne les remplacer que par une piéce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 2 * 3 <u>^</u> 4 <u>^</u> 4	4-961-804-01 1-575-651-61	FOOT SEAT PLASTIC STAND BUTTON BOARD CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CORD, AC (LX56: CND, US)	CIS, SP)	39 40 41 * 42 * 42	4-947-539-01 A-4604-946-A 1-652-482-11	TURNTABLE PLATTER RUBBER MAT DUST COVER ASSY PHONO BOARD (LX56) CORD BOARD (LX56P)	
<u>↑</u> 4 <u>↑</u> 4 <u>↑</u> 4 5 6	1-690-608-11 1-696-570-21 1-555-116-11	CORD, AC (LX56: E) CORD, AC (LX56: AUS) CORD, AC (LX56: UK) CORD, PHONO(BLACK) KNOB SPEED(BLACK)		43 44 45 46 47	4-951-290-01 A-4604-940-A 4-947-464-01	COVER, CARTRIDGE STYLUS (CN-234) ARM ASSY, TONE COUNTER WEIGHT SCREW (LX56)	
6	4-964-177-11			* 48 49		RELAY BOARD (LX56) CORD, DC (LX56P)	
7 7	4-964-178-01 4-964-178-11	(LX56:SILVER, SILVER MET KNOB REJECT(BLACK) KNOB REJECT (LX56:SILVER, SILVER MET		50 M1 SW1	3-701-806-00 A-4604-945-A	ADAPTOR, 45	
8 8	4-964-184-01 4-964-184-11	KNOB POWER (LX56:BLACK)	,	S₩2 S₩3 <u>^</u> S₩4	1-692-211-11 1-692-835-11		) (1 KEY) ) (1 KEY)(LX56) X-56: AUS, E, MX, MY, SP) (LX56: AEP, EE, IT, CIS)
9 10	4-890-173-00			↑T1 ↑T1		TRANSFORMER, POWER	: AUS, E, PX, EA, JE, MX, SP)
11 12 13	3-659-350-00 A-4604-947-A 4-947-485-01	RETURN ASSY, LEVER		<u> </u>		TRANSFORMER, POWER TRANSFORMER, POWER	
14 15 16 17	4-947-477-01						
19 20 21 22 23	4-963-537-01 4-963-536-01 4-963-535-01 4-947-514-01 4-947-467-01	LINK RETURN ADJUST CAM 4MM CS RING					
24 25 26 26	A-4660-498-A A-4384-982-A	TONE ARM ELEVATOR HINGE ASSY PANEL (B) ASSY, FRONT (LX56: SIL PANEL (B) ASSY, FRONT (LX56: SILVER METAL					
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (I					
26 26 * 27 * 27	A-4660-976-A 4-950-487-01	FRONT PANEL (G) ASSY (LX56: BLACK) FRONT PANEL (G) ASSY (LX56P) MAIN CABINET (B)(BLACK) MAIN CABINET (B)	TALLIC)				
28	4-947-505-01	(LX56:SILVER, SILVER ME CUSHION MOTOR	(IALLIC)				
29 30 31 32 33	4-947-504-01 3-451-162-00 3-701-445-21 4-947-498-01 4-947-497-01	WASHER (56) WASHER STELL BALL					
34 35 36 37 38	4-948-101-01	WIPER REJECT SPRING (38) GEAR ASSY, SPUR					

### **PHONO** RELAY

### **ELECTRICAL PARTS LIST**

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS All resistors are in ohms METAL: Metal-film resistor METAL OXIDE: Metal Oxide-film resistor F: nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this

 SEMICONDUCTORS In each case, u:  $\mu$  , for example: uA...: μ A..., uPA...: μ PA.... uPB...:  $\mu$  PB..., uPC...:  $\mu$  PC... uPD...:  $\mu$  PD...

- CAPACITORS  $uF: \mu F$
- COILS  $uH: \mu H$

· AUS : Australian model · CND : Canadian model • EE : East European model

 IT : Italian model MX : Mexican model • EA : Saudi Arabia model

 SP : Singapore model MY : Malaysia model

 JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque sont critiques pour la sécurité.

Ne les remplacer que par une piéce portant le numéro spécifié.

Remark

Ref	No. Part No.	Description		Remark	Ref. No.	Part No.	
*	1-644-410-11	CORD BOARD (L:	X56P)			ACCESSORIES	
***	******	******	******	******		3-758-045-1	
*	1-652-482-11	PHONO BOARD (1	LX56)			(English 3-758-045-21 3-758-045-41	1 M
		< CAPACITOR >				3-758-045-5	Ger 1 M
С	1 1-126-012-11	ELECT < DIODE >	470uF	16V		3-758-045-61	1 M
D D D D	2 8-719-200-82 3 8-719-200-82	DIODE 11ES2 DIODE 11ES2			* * ******	4-947-532-01 4-947-533-01 3-701-806-00	1 S 0 A
ΔF	1 1-532-613-XX	< FUSE > FUSE TIME-LAG	(T200mA)			****** HARD *****	W.
***	*******	******	*******	******	#1	7-621-773-87	7 5
*	1-649-845-11	RELAY BOARD (I	LX56)		#2 #3 #4	7-623-210-22 7-624-110-04 7-685-105-01	2 W
***	*******	******	******	******	#5	7-685-645-79	) S
					#6	7-685-646-79	) S

	ACCESSORIES & PACKING MATERIALS
	*****************
	3-758-045-11 MANUAL INSTRUCTION
	(English, French, Spanish, Portuguese) (LX56 AEP, CND)
	3-758-045-21 MANUAL INSTRUCTION (English) (LX56 US, UK)
	3-758-045-41 MANUAL INSTRUCTION
	(German, Dutch, Swedish, Italian) (LX56 AEP, IT)
	3-758-045-51 MANUAL INSTRUCTION
	(English, French, Spanish, Chinese)
	(LX56 AUS, E, PX, MX, EA, MY, SP, JE) 3-758-045-61 MANUAL INSTRUCTION
	(English, German, Polish) (LX56 EE, CIS)
	(Bilgirsh, definall, 1011311) (Bild BE, Clo)
	4-947-532-01 SNOW BOX (L)
	4-947-533-01 SNOW BOX (R)
	3-701-806-00 ADAPTOR, 45
. 4 4 4 4	******************
****	***********
	*********
	HARDWARE LIST
	********
	7-621-773-87 SCREW (64)
2	7-623-210-22 WASHER (57)
3	7-624-110-04 6MM E RING
	7-685-105-01 SCREW (59)
)	7-685-645-79 SCREW (68)
,	7-685-646-79 SCREW (60)
,	7-685-647-79 SCREW (58)
	7 000 011 10 DOLLDII (00)

Description

#8

7-688-005-01 WASHER (69)

# <u>MEMO</u>

## PS-LX56/LX56P

## **REVISION HISTORY**

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.07	PDF registration
		(including: 9-959-216-81, 9-959-216-82, 9-959-216-83, 9-959-216-91)
1.0	1993.11	New

# PS-LX56/LX56P

SONY

# **SERVICE MANUAL**

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
UK Model
E Model
Australian Model

# **SUPPLEMENT-3**

File this supplement with the service manual.

Subject: SILVER METALLIC MODEL ADDITION (PS-LX56)

- PS-LX56 (SILVER METALLIC MODEL) is similar to the earlier PS-LX56 (BLACK MODEL).
- Refer to the previous issued service manual for information not contained in this supplement-3.

### **DIFFERENCE TABLE**

Page		PS-LX5	6 (BLACK Model)		PS-LX56 (SILVER METALLIC Model)				
	Ref. No.	Part No.	<u>Description</u>	<u>Remark</u>	Ref. No.	Part No.	<u>Description</u>	<u>Remark</u>	
7	6 7 8 26 * 27	4-964-177-01 4-964-178-01 4-964-184-01 A-4660-578-A 4-950-487-01	KNOB SPEED KNOB REJECT KNOB POWER (LX56) FRONT PANEL (G) ASSY MAIN CABINET (B)	(LX56:BLACK)	6 7 8 26 * 27	4-964-177-11 4-964-178-11 4-964-184-11 A-4411-941-A 4-950-487-11	KNOB SPEED KNOB REJECT KNOB POWER PANEL (B) ASSY, FRONT MAIN CABINET (B)		

#### NOTE:

 Items marked "\*" are not stocked since they are seldom required for routine service.
 Some delay should be anticipated when ordering these items.

# SS-D290

# **SERVICE MANUAL**



Canadian Model E Model Australian Model PX Model

This set is the speaker system in LBT-A110/A110K/A290/A290K/A295.

Photo: L-CH

#### **SPECIFICATIONS**

Speaker system

: 3-way speaker system

Dimensions

: Approx. 4.3kg per speaker : Approx. 260 × 475 × 185mm

(w/h/d, including projections)

Design and specifications are subject to change without notice.



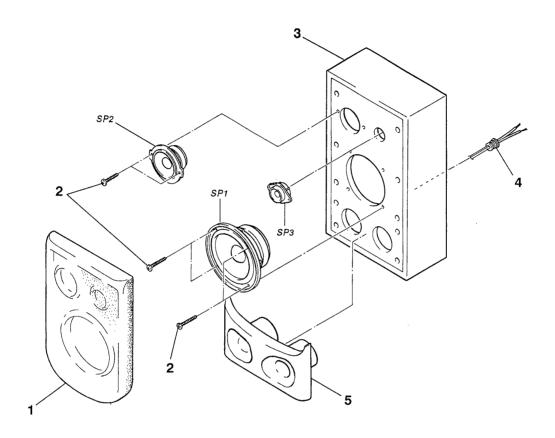
## **EXPLODED VIEW AND PARTS LIST**

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
   The mechanical parts with no reference
- The mechanical parts with no reference number in the exploded views are not supplied.

Abbreviations

AUS: Australian Model
MY: Malaysia Model
MX: Mexican Model
SP: Singapore Model
EA: Saudi Arabia Model



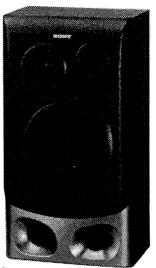
Ref. No.	Part No.	Description Remark	Ref. No.	Part No.	Description	Remark
1	X-4944-228-1	PANEL (L) ASSY, FRONT (Canadian, E, AUS,	4	1-575-696-11	CORD, SPEAKER (WITH (C))	
1	X-4944-229-1	MY, MX, PX) (Made in Malaysia) PANEL (R) ASSY, FRONT (Canadian, E, AUS,	5		DUCT ASSY, ORNAMENTAL (Canadian MY, MX, PX) (Made in Ma	laysia)
1	X-4944-301-1	MY, MX, PX) (Made in Malaysia) PANEL (L) ASSY, FRONT (E, AUS, MX, SP, EA) (Made in Indonesia)	5	X-4944-587-1	DUCT ASSY, ORNAMENTAL(E, AUS, MX (Made in Indo	
1	Y-1011-302-1	PANEL (R) ASSY, FRONT (E, AUS, MX, SP, EA)	SP1		SPEAKER (16CM) (WOOFER)	
1	N 4044 002 1	(Made in Indonesia)	SP2 SP3		SPEAKER (6CM) (MID-RANGE) SPEAKER (2CM) (TWEETER)	
2	4-874-614-61	SCREW (M3. 5X16)			************	****
* 3	A-4353-679-A	CABINET (L) ASSY, SPEAKER (Canadian,			**************************************	****
-		E, AUS, MY, MX, PX) (Made in Malaysia)			S & PACKING MATERIALS *******	
* 3	A-4353-680-A	CABINET (R) ASSY, SPEAKER(Canadian,		,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·	
		E, AUS, MY, MX, PX) (Made in Malaysia)	*	4-964-536-01	CUSHION (E, AUS, MX, SP, EA)	
* 3	A-4353-681-A	CABINET (L) ASSY, SPEAKER	·	1 004 000 01	(Made in I	ndonocia)
* 3		(E, AUS, MX, SP, EA) (Made in Indonesia) CABINET (R) ASSY, SPEAKER	*	4-964-536-11	CUSHION (Canadian, E, AUS, MY, MX, Made in Ma	PX)
		(E, AUS, MX, SP, EA) (Made in Indonesia)	Į			

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# SS-D555

# **SERVICE MANUAL**

**REVISED** 



US Model E Model

This set is the speaker system in LBT-A295/D550.

Photo: R-CH

#### **SPECIFICATIONS**

Speaker system

: 3-way speaker system

Mass Dimensions : Approx. 4.8kg per speaker : Approx. 260 × 475 × 185mm

(w/h/d, including projections)

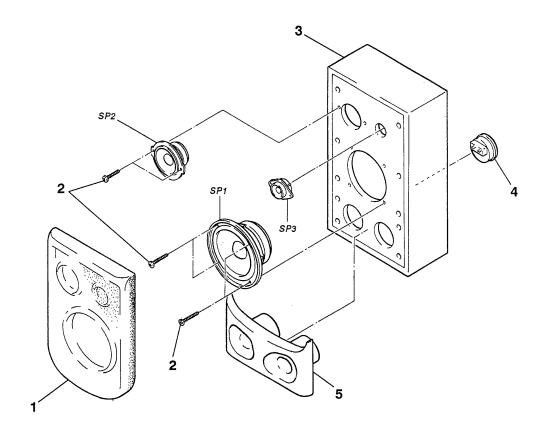
Design and specification subject to change without notice.



### **EXPLODED VIEW AND PARTS LIST**

#### NOTE

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 1 2 * 3 * 3	X-4944-229-1 4-874-614-61 A-4353-686-A	PANEL (L) ASSY, FRONT PANEL (R) ASSY, FRONT SCREW (M3.5X16) CABINET (L) ASSY, SPEAKER CABINET (R) ASSY, SPEAKER		SP2 SP2 SP3 * ******	1-504-647-11 1-544-453-21 1-765-601-11	SPEAKER (6CM) (MID-RANGE) (US) SPEAKER (6CM) (MID-RANGE) (E) SPEAKER (2CM) (TWEETER) CORD, WITH CONNECTOR ************************************	******
4 5 SP1 SP1	X-4944-589-1 1-504-514-11	TERMINAL BOARD (SPEAKER TERMINDUCT ASSY, ORNAMENTAL SPEAKER (16CM) (WOOFER) (US) SPEAKER (16CM) (WOOFER) (E)	NAL)			S & PACKING MATERIALS ******** CUSHION	